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ABSTRACT

The Chapter 1 program represents the nation's largest federal investment in elementary and secondary schools. This report describes the operation of Chapter 1 services, with a focus on instructional practices and classroom organization. Specifically, the report describes how services differed by the poverty level of a school and by the type of delivery model utilized. The study followed large national samples of students in three grade cohorts. Information was collected from the students, their teachers, parents, principals, and school districts. Baseline data were collected on students in the first-grade cohort in autumn 1991 and on students in the third- and seventh-grade cohorts in spring 1992. The report is based on the 1992 first-year followup data. Findings indicate that high-and low-poverty schools differed in several important ways in which Chapter 1 services were organized and used. High-poverty schools were far more likely to use inclass service-delivery models, which allowed more time for instruction, disrupted service delivery less often, and created a greater emphasis on coordination between Chapter 1 and regular teachers. Teachers in high-poverty schools reported allocating more time for instruction and more consistent scheduling of Chapter 1 services than did their counterparts in low-poverty schools. The operation of Chapter 1 in high-poverty schools also encompassed a greater diversity of services than it did in low-poverty schools. However, high-poverty schools tended to follow traditional reading-instruction methods, experienced a more pronounced lack of basic supplies, and were less likely to have student access to computers. A total of 34 exhibits are included. The appendix contains 47 supporting tables. (Contains seven references.) (LMI)

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PROSPECTS:

CHAPTER 1 SERVICE DELIVERY REPORT

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Chapter 1 program represents the nation's largest federal investment in elementary and secondary schools. Begun in 1965 to help meet the educational needs of children in poverty, the current Chapter 1 budget is over $6 billion a year, and includes funding to more than 90 percent of all school districts. In 1988, Congress mandated a national longitudinal study to examine the program's long- and short-term effects on students' success in school. This study, known as *Prospects*: The Congressionally Mandated Study of Educational Opportunity and Growth, involves following large national samples of students in three grade cohorts. Information is collected from the students, their teachers, parents, principals, and districts. Baseline data were collected on students in the first-grade cohort in the Fall of 1991, and on students in the third- and seventh-grade cohorts in the Spring of 1991. First-year followup data were collected on students in all three cohorts in the Spring of 1992, when the majority of students were in the first, fourth, and eighth grades. The current report is based on the 1992 first-year followup data.[1]

The purpose of this report is to describe the operation of Chapter 1 services, with particular emphasis on instructional practices and classroom organization. Two questions frame the discussions in the report: how do services differ by poverty level of the school, and how do services differ by the delivery model utilized. This report focuses on instructional practices and features of classroom organization, including staffing, resources and materials, instructional time, grouping practices, and coordination issues.

The report is organized in five parts. The first chapter describes how schools and districts target their Chapter 1 services and use their Chapter 1 funds. Chapter 2 describes the allocation and use of instructional time. The arrangement of Chapter 1 services, including service delivery model utilized, is considered in Chapter 3. The instructional practices and processes in regular classrooms are described in Chapter 4. Finally, issues pertaining to coordination of services are discussed in Chapter 5. Specific findings from each chapter are highlighted below.

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[1] All computations in this report are based on averages or percentages weighted for a specific student population (first-grade, third-grade, or seventh-grade cohort). The unit of analysis is always the student, and the relevant student weights are used so that the estimates relate to a representative sample of students.

Given that the unit of analysis is the student, the measures of districts, classrooms, and schools are always anchored to a specific population. For example, in discussing funding, we focus on how districts allocate their Chapter 1 dollars to salaries, materials, computers, and other categories. The data reported pertain to the students in districts, not to districts per se.

Student selection policies:

- Almost all students are in schools that use standardized testing to select students for Chapter 1 services. Although many students are in districts that also use teacher judgement, few students are in districts that report teacher judgement to be the most important criterion for student selection. Students in high-poverty schools are least likely to be in schools that heavily weight teacher recommendations.

Staffing policies and practices:

- Districts report that between 70 and 80 percent of Chapter 1 dollars are allocated to teacher, administrator, aide, clerical, and other salaries in the school.

- High-poverty and low-poverty schools differ in how they allocate Chapter 1 funds to salaries. Low-poverty schools spend a greater proportion of their funds on teacher salaries than do high-poverty schools (55 vs 43 percent). High-poverty schools spend more on teacher aides and administrators than do low-poverty schools.

- High-poverty schools actually have a lower overall student to adult ratio than low-poverty schools (14:1 vs 22:1). However, these favorable staffing ratios are contributed to by a greater proportion of classroom aides and other noncertified personnel. High-poverty schools continue to have more students per regular teacher than do low-poverty schools (38:1 vs 22:1).

Staff experience and education:

- The years of teaching experience of Chapter 1 and regular teachers across poverty levels of the school are essentially equivalent.

- Most students are taught by certified teachers. However, high-poverty schools, in contrast to low-poverty schools, have a higher proportion of math teachers who are not certified. Most students have regular teachers who have regular, permanent teaching certificates. More students in the third and seventh grade cohorts in high-poverty schools have regular teachers who hold temporary, provisional or emergency certificates than those in lower poverty schools.

- Between 40 and 50 percent of students have regular teachers who hold a graduate degree. In general, the regular and Chapter 1 teachers are well educated.

Instructional Time

- Little difference exists across poverty level or grade in the number of days schools are in session.

- Schools allocate substantially more time to reading than math instruction in grades 1 and 4, and about the same amount of time in grade 8.

- High-poverty schools schedule more time for reading and math instruction than low-poverty schools.

- High-poverty schools utilize about the same proportion of scheduled time for instruction as low-poverty schools in grades 1 and 4, but in grade 8, high-poverty schools utilize less of their scheduled time for instruction than do low-poverty schools.

- High-poverty schools are more likely to utilize strategies to increase learning time (such as before/after school and summer school programs) than are low-poverty schools.

- High-poverty schools have more time allocated to Chapter 1 instruction than do low-poverty schools.

- High-poverty schools, considering Chapter 1 instruction, regular instruction, and additional outside of school formal learning opportunities, have more instructional time in reading and math than do low-poverty schools.

Service delivery models

- The most predominantly used instructional delivery model is limited pull-out. Low-poverty schools utilize limited pull-out to a much greater extent than do high-poverty schools.

- In-class models are the second most frequently used service delivery format. About one quarter of first graders attend schools in districts that utilize this approach as their main service delivery option. About one third of first grade students receive Chapter 1 reading services in-class. High-poverty schools are more likely to use in-class models than are low-poverty schools.

- High-poverty schools are far more likely to use more than one service delivery model than are low-poverty schools (35 vs 17 percent at the first grade).

- Limited pull-out is utilized in reading instruction to a much greater degree than in math or language arts instruction.

- Additional approaches, including tutoring, preschool, and computer assisted instruction are also in evidence as a part of Chapter 1 operation. Preschool is a predominant strategy in only about 5 percent of districts, at least some computer assisted instruction is evident widely in Chapter 1 programs, and tutoring is used widely in the early grades.

Subject matter and services

- Most students who participate in Chapter 1 receive services in reading. Of the students participating in Chapter 1, 96 percent of first graders , 83 percent of fourth graders, and

81 percent of eighth graders participate in reading. About 30 percent of first graders receive services in both reading and math. The corresponding figures for grades 4 and 8 are 37 and 22 percent, respectively.

- Participation in both reading and math is consistently related to school poverty. In the first grade, a greater percentage of students in high-poverty schools participate in both reading and math than do participants in low-poverty schools (39 vs 29 percent). For grades 4 and 8, a greater percentage of students in high-poverty schools in comparison to low-poverty schools participate in both reading and math.

- Relatively few Chapter 1 participants receive services in non-instructional areas, such as counseling or health (around 3 percent).

Staffing

- About 80 percent of first grade students are in schools in which Chapter 1 reading services are provided either by a Chapter 1 teacher (45 percent) or by a Chapter 1 teacher and aide (38 percent).

- Staffing arrangements for Chapter 1 instruction for first grade students differ for low- and high-poverty schools. Although classrooms in low- and high-poverty schools have about the same number of staff, the high-poverty schools utilize aides more often, while low-poverty schools utilize teachers.

- Aides in low-poverty schools are more likely to have responsibility for non-instructional activities, while aides in high-poverty schools have responsibilities for instructional and non-instructional tasks.

- Aides who provide Chapter 1 services in pull-out format are more likely to carry out independent instructional activities than are aides in an in-class setting.

Time

- Most students receive Chapter 1 services five days per week. Students in high-poverty schools are more likely to receive services five days per week than are students in low-poverty schools (80 percent vs 47 percent in reading). Students in these high-poverty schools who participate in pull-out programs have Chapter 1 instruction scheduled five days per week with greater frequency than do those who are in an in-class program (roughly 90 to 78 percent).

- Appreciable differences in the amount of time used for Chapter 1 instruction exist across poverty categories. In general, students in high-poverty schools receive more Chapter 1 instruction than do students in low-poverty schools. There are also important differences within poverty categories by service delivery model in the amount of time students receive instruction. Student in in-class arrangements receive about five minutes more per day of academic time than do students in pull-out programs.

Materials

- In elementary grades, the Chapter 1 math and the regular math teachers are likely to use the same materials at the same level. However, the Chapter 1 reading teachers report more often that they utilize different materials, but at the same instructional level, as those used by the regular reading teacher.

Chapter 1 instructional grouping practices:

- The dominant practice in Chapter 1 math is whole class instruction. In Chapter 1 reading, within-class grouping is used slightly more often than whole class instruction.

Regular classroom instruction:

- High-poverty schools rely upon a traditional approach to reading instruction to a greater degree than low-poverty schools. This approach consists of a greater emphasis on reading readiness and decoding, utilizing three reading groups, and basal series/textbooks.

- Whole class instruction is the dominant practice. First grade reading is the only situation in which appreciable grouping is used.

- When grouping is utilized, the basis for grouping is most often similar abilities.

- Students' regular math and reading classes contain about 22 students, with little variation by school poverty.

- Tutoring is most often carried out as peer tutoring, followed by tutoring using a certified teacher. The use of paraprofessionals to tutor is frequent in high-poverty schools.

- For both reading and math instruction, teachers of students in high-poverty schools are most likely to report that computers are never used in their regular classrooms.

- Most students, even in high-poverty schools, are in classrooms where computers are used at least some of the time.

- The main reasons cited for using computers are mastery of content and concepts, and to motivate and interest students.

Coordination of services

- The most frequently used means of communication between regular and Chapter 1 teachers is informal discussions.

- Regular and Chapter 1 teachers both report with a high frequency that they utilize similar materials for instruction.
- Chapter 1 and regular classroom teachers agree that the primary responsibility for the student's instruction and progress rests with the regular classroom teacher.
- State Chapter 1 coordinators are influential in decisions made by district coordinators, especially in high-poverty schools.
- Districts report a modest degree of resource sharing between Chapter 1 and other compensatory education programs, with the greater sharing being in the district staffing. This reflects the fact that district staff may coordinate both Chapter 1 programs and other compensatory efforts.

Conclusions:

This report describes the operation of the Chapter 1 program using the 1992 *Prospects* data. Specific attention is given to contrasts between high- and low-poverty schools. High- and low-poverty schools differ in several important regards in how Chapter 1 services are organized and used. High-poverty schools, in comparison to low-poverty schools, are far more likely to use in-class service delivery models. In turn, the use of this model affects many other features of classroom practice, including allowing more time for instruction, having less disruptive delivery of services, and creating a greater emphasis on coordination between Chapter 1 and regular teachers.

Students in high-poverty schools have teachers who report allocating more time for instruction and more consistent scheduling of Chapter 1 services than do such teachers in low-poverty schools.

The operation of Chapter 1 in high-poverty schools also encompasses a greater diversity of services than it does in low-poverty schools. Students in high-poverty schools, for example, are much more likely to participate in Chapter 1 in both math and reading than are students in low-poverty schools. High-poverty schools are more likely to use more than one service delivery model and to utilize Chapter 1 for non-instructional services than are low-poverty schools.

On the other hand, high-poverty schools, in comparison to the other schools in the sample, show a greater tendency to follow traditional reading instruction methods, using three instructional groups, textbooks and basal series, and teacher-directed instruction that primarily emphasizes basic skill acquisition.

The lack of basic supplies, such as pencils and paper, is much more pronounced in high- than in low-poverty schools. High-poverty schools, when compared to low-poverty schools, are also much less likely to have access to computers for their students.

CHAPTER I

CHAPTER 1 PROGRAM OPERATION: SELECTION AND STAFFING ISSUES

I. CHAPTER 1 PROGRAM OPERATION: STUDENT SELECTION AND STAFFING ISSUES[1]

CHAPTER OVERVIEW AND SUMMARY

This chapter describes how schools and districts target and use their Chapter 1 funds, focusing in particular on differences in use between high- and low-poverty schools. Districts and schools exercise a great deal of latitude in how they select schools and students for services, and how they utilize their Chapter 1 dollars. Because these decisions are consequential for the operation and delivery of the Chapter 1 program, they are important to consider at the outset in this report on service delivery.

This chapter finds many commonalities in selection and use patterns across poverty level of the schools. For example, the majority of Chapter 1 dollars continues to support salaries, while very limited funds are used for such activities as staff development and parent involvement.

At the same time, important differences in how high- and low-poverty schools use their Chapter 1 funds exist. High-poverty schools invest a greater proportion of their Chapter 1 dollars in teacher's aides and other non-certified personnel than do low-poverty schools. Differences in staffing patterns between high- and low-poverty schools are consistent with these allocation decisions.

The specific findings in this Chapter include:

Student selection policies:

- Most students are in districts that use free and reduced-price lunch, and AFDC enrollment counts to select schools for receipt of Chapter 1 funds.
- The selection options most widely used by districts are the grade-span grouping option, and the 25 percent rule. The grade-span grouping option allows districts to provide services only to a certain grade-span, and use the average poverty rate of that grade span as the benchmark for receipt of funds, rather than the poverty rate of the district as a whole. The 25 percent rule allows districts to serve schools with 25 percent or more students who are from low-income families, even if the district average is higher than 25 percent. Students in high-poverty schools are most likely to be in districts that use the 25 percent rule.
- Almost all students are in schools that use standardized testing to select students for Chapter 1 services. Although many students are in districts that also use teacher judgement, few districts report teacher judgement to be the most important criterion for student selection. Students in high-poverty schools are least likely to be in schools that heavily weight teacher recommendations.

Staffing policies and practices:

- Districts report that between 70 and 80 percent of Chapter 1 dollars are allocated to teacher, administrator, aide, clerical, and other salaries in the school.
- High-poverty and low-poverty schools differ in how they allocate Chapter 1 funds to salaries. Low-poverty schools spend a greater proportion of their funds on teacher salaries than do high-poverty schools (55 vs. 43 percent). High-poverty schools spend more on teacher aides and administrators than do low-poverty schools.
- High-poverty schools actually have a lower overall student-to-adult ratio than low-poverty schools (21.9 vs 13.5). However, these favorable staffing ratios are contributed to by a greater proportion of classroom aides and other non-certified personnel. High-poverty schools continue to have more students per regular teacher than do low-poverty schools (38:1 vs 22:1).

Staff experience and education:

- The years of teaching experience of Chapter 1 and regular teachers across poverty levels of the school are equivalent.
- Most students are taught by certified teachers. However, high-poverty schools have a higher proportion of math teachers who are not certified. Most students have regular teachers with regular, permanent teaching certificates. More students in the third and seventh grade cohorts in high-poverty schools have regular teachers with temporary, provisional or emergency certificates than those in lower poverty schools.
- Between 40 and 50 percent of students have regular teachers with a graduate degree. In general, the regular and Chapter 1 teacher are well educated.

ALLOCATION OF CHAPTER 1 FUNDS TO SCHOOLS AND STUDENTS

The allocation formula for apportioning funds to districts, and the methods that are used to select schools and students for receipt of Chapter 1 funds and services all affect the extent to which Chapter 1 serves the neediest students. About 14 percent of schools that serve more than 50 percent poor children do not receive any Chapter 1 funds. Many low achieving students in poor schools do not receive services. An earlier report on the *Prospects* data (Abt Associates, 1993) found that one-third of the low achieving students in high-poverty schools do not receive Chapter 1 services.

As attention is increasingly focused on changing how students and schools are selected for participation, it is important to understand how the current targeting procedures operate. In this section we briefly describe the primary policies by which districts select schools to receive Chapter 1 funds, and schools select students to receive Chapter 1 services.

ELIGIBILITY AND SELECTION OF SCHOOLS

Sources of Information for School Selection

Consistent with findings reported in the National Assessment of Chapter 1, almost all students in all three cohorts are in districts that use free or reduced price lunch counts to select attendance areas or schools to receive Chapter 1 funds, and between 25-30 percent of students are in districts that use AFDC enrollment counts. There is little variation by school poverty level with regard to use of these two data sources. The next most frequently used data source is the number of neglected and delinquent children, although for all three cohorts it appears that only children in the lower poverty schools are in districts that use this source. The nearly uniform reliance on free lunch count for selection of schools underscores the necessity of accurate and timely data on child poverty.

Use of School Selection Options

Districts can select schools for receipt of Chapter 1 funds through the use of a variety of school selection options. The options allow districts some flexibility in how they target Chapter 1 funding. For example, the grade-span grouping option allows districts to provide services only to a certain grade-span, and use the average poverty rate of that grade span as the benchmark for receipt of funds, rather than the poverty rate of the district as a whole. The 25 percent rule allows districts to serve schools with 25 percent or more students who are from low-income families, even if the district average is higher than 25 percent. Finally, the grandfather option allows districts to include a school that is no longer eligible, but was eligible in at least one of two preceding years, the no-wide variance option allows districts to include schools with uniformly high-poverty concentration levels, and the attendance vs. residence option allows inclusion of an attendance area if the schools contain a percentage of low-income children similar to the percentages of eligible attendance areas.

As can be seen in Exhibit 1.1, the most frequently used selection option is the grade-span grouping option. In addition, across cohorts, between 30 percent and 36 percent of students are in districts that use the 25 percent rule. The use of these options can result in eligible children who are not served, and normally ineligible students who receive services.

ELIGIBILITY AND SELECTION OF STUDENTS

Most students are in districts that use standardized testing in order to define the pool of Chapter 1 eligible students, with little variation by school poverty. Teacher judgement is also used for deciding student eligibility, with about two-thirds of students in districts that incorporate teacher judgement into the decision process. In all three cohorts, students in the highest poverty schools are the least likely to

EXHIBIT 1.1

PERCENTAGE OF STUDENTS IN DISTRICTS THAT USED INDICATED OPTIONS TO SELECT CHAPTER 1 ATTENDANCE AREAS OR SCHOOLS, BY POVERTY CONCENTRATION OF THE SCHOOLS

SELECTION OPTION USED	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Grade Span Grouping	40.56	40.68	25.33	37.98	53.20	36.10
No Wide Variance	24.78	41.95	42.09	27.61	9.18	12.76
25 Percent Rule	31.13	13.69	22.10	35.23	40.31	43.13
Attendance vs. Residence	23.80	30.08	11.33	48.40	11.16	34.25
Grandfathering	29.83	32.38	17.41	36.06	21.96	43.56
Skipping Schools	10.01	7.84	13.42	0	12.41	11.32
Achievement vs. Poverty	4.43	5.81	9.22	0	3.59	2.98
% Missing	6.26	8.66	4.81	0	6.62	11.23
Valid N	7124	988	883	782	1588	2675
Valid WTD N	2075194	576956	290928	199046	569104	377566
3RD GRADE COHORT						
Grade Span Grouping	39.06	43.80	25.53	37.99	50.68	31.28
No Wide Variance	25.54	38.59	31.55	28.90	15.04	13.74
25 Percent Rule	29.79	12.07	22.94	35.23	39.49	42.87
Attendance vs. Residence	27.20	31.06	13.57	45.19	17.61	34.24
Grandfathering	32.27	32.58	16.23	34.61	28.21	44.17
Skipping Schools	10.55	9.39	11.82	1.11	15.23	12.29
Achievement vs. Poverty	4.31	4.57	10.60	0.63	4.69	2.32
% Missing	6.08	7.38	4.45	0.31	9.14	10.39
Valid N	6560	1043	771	856	1371	2320
Valid WTD N	1585925	488628	221142	203086	305587	303333
7TH GRADE COHORT						
Grade Span Grouping	33.32	41.09	22.87	29.86	46.44	35.58
No Wide Variance	17.91	41.90	0	26.81	12.41	1.75
25 Percent Rule	36.02	25.78	27.31	36.30	62.80	52.95
Attendance vs. Residence	27.34	12.23	20.00	30.45	45.44	52.80
Grandfathering	26.11	12.27	24.10	27.66	35.81	49.38
Skipping Schools	7.21	9.39	3.50	11.85	9.88	0
Achievement vs. Poverty	4.06	5.28	4.61	0.04	7.90	4.12
% Missing	7.46	5.12	13.29	2.47	7.11	13.04
Valid N	4515	744	863	1293	908	653
Valid WTD N	1561633	411347	414228	372747	204935	151483
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

Source: *Prospects*, District Questionnaire

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be in districts that use teacher judgement. About one-quarter of students are in districts that use something other than standardized tests, locally developed tests, or teacher judgement.

In addition to reporting the various methods used for eligibility decisions, districts are also asked to designate the most important measure they use. As can be seen in Exhibit 1.2, most students are in districts that identify standardized tests as the most important measure, while fewer students are in districts that select teacher judgement as most important. Despite the criticisms and concerns over the use of standardized tests for program selection and placement, these tests remain the most frequently utilized placement tool. Teacher judgement is not used very often, and this is particularly so in high-poverty schools.

Those districts that use teacher judgement also indicated the ways in which they use such recommendations. As can be seen in Exhibit 1.3, about 65 percent of students are in districts that use teacher judgement for special circumstances, such as mid-year transfers or special referrals. About 50 percent of students are in districts that use teacher nominations to determine which students should be tested for Chapter 1 eligibility.

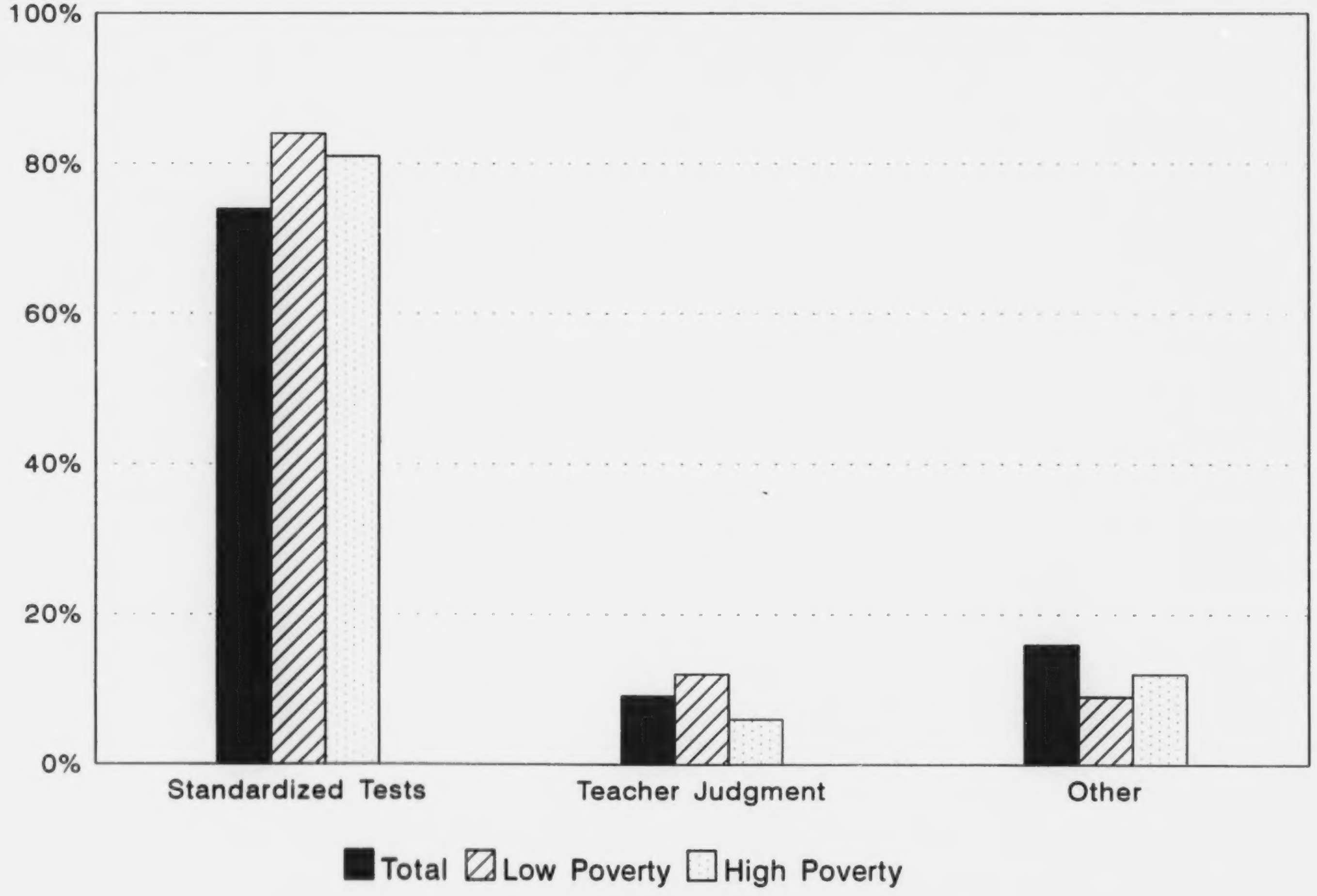
Exhibit 1.3 presents district level information about the use of teacher judgment. The following paragraph discusses school level information, and thus may not match the district-level information. At the school level, between 46 percent and 64 percent of students, across cohorts, are in schools that gave major weight to teacher recommendations in the student selection process. As with the district-level information, students in the highest poverty schools are less likely than those in the lowest poverty schools to be in schools that heavily weight teacher recommendations. In fact, those students in the high-poverty schools are more likely to be in schools that give **no** weight to teacher recommendations than those in low-poverty schools. Finally, students in school-wide programs are more likely than high-poverty students in non-school wide programs to be in schools that heavily weighted teacher recommendations.[2]

FUNDING USE PATTERNS

How districts and schools decide to use their Chapter 1 dollars is of some consequence for the operation of the Chapter 1 program. For example, decisions to hire classroom aides, as opposed to regular teachers, or to expend Chapter 1 money on personnel as opposed to materials and computers may create opportunities for specific instructional strategies, while limiting use of others. Allocation decisions, then, are linked to program operation in a basic way by limiting and making possible the use of specific

Exhibit 1.2

Percentage of students in districts that rated specific measures as most important in determining Chapter 1 student eligibility, by school poverty concentration



Source: Prospects, District Questionnaire

EXHIBIT 1.3

PERCENTAGE OF STUDENTS IN DISTRICTS THAT USED TEACHER JUDGEMENT IN SPECIFIED MANNER TO DETERMINE ELIGIBILITY OR SELECTION FOR CHAPTER 1 SERVICES, BY POVERTY CONCENTRATION OF THE SCHOOLS

MANNER IN WHICH TEACHER JUDGEMENT IS USED	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Teacher Judgement Used for Special Circumstances	63.26	58.90	84.75	61.26	57.90	52.73
Teachers Nominate Students	58.12	58.60	57.22	49.98	71.76	47.58
Teachers Decide-Above Cutoff-Yes Chapter 1	37.35	48.93	57.56	32.91	9.72	45.48
Teachers Decide-Below Cutoff-No Chapter 1	43.93	51.18	80.61	37.68	15.81	30.53
Teachers Prepare Rating Scale	46.35	35.87	32.35	38.74	79.81	37.54
Other	4.19	5.11	2.38	0	2.14	3.69
% Missing	0	0	0	0	0	0
Valid N	7142	1337	1240	685	1610	2062
Valid WTD N	2213962	614510	449427	236829	588917	262685
3RD GRADE COHORT						
Teacher Judgement Used for Special Circumstances	66.72	62.52	82.15	64.97	69.34	51.10
Teachers Nominate Students	53.77	59.84	56.14	48.65	60.22	40.16
Teachers Decide-Above Cutoff-Yes Chapter 1	44.09	55.81	53.12	42.12	19.48	46.76
Teachers Decide-Below Cutoff-No Chapter 1	52.79	59.29	81.65	47.55	28.63	31.07
Teachers Prepare Rating Scale	41.33	38.75	33.86	38.86	64.22	37.19
Other	4.96	5.49	2.48	0	3.93	3.69
% Missing	0	0	0	0	0	0
Valid N	6663	1393	1210	762	1343	1756
Valid WTD N	1759732	546528	372207	246594	331642	198517
7TH GRADE COHORT						
Teacher Judgement Used for Special Circumstances	62.52	47.55	74.90	70.41	45.81	70.71
Teachers Nominate Students	49.95	59.14	48.60	42.64	49.86	35.67
Teachers Decide-Above cutoff-Yes Chapter 1	33.61	40.04	33.76	34.17	11.35	35.64
Teachers Decide-Below Cutoff-No Chapter 1	43.39	35.93	66.59	42.09	15.58	9.84
Teachers Prepare Rating Scale	47.21	66.59	37.48	49.94	31.05	24.64
Other	6.90	15.22	0	2.60	17.02	0
% Missing	0	0	0	0	0	0
Valid N	4613	1093	1024	1243	800	408
Valid WTD N	183520	543961	581057	396170	197842	110984
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

Source: *Prospects*, District Questionnaire instructional practices and models. Given this fundamental connection, it is appropriate for this report on service delivery to begin with a brief discussion of Chapter 1 resource allocation and consequences.

Chapter 1 funds are used most frequently, and in the greatest proportion, to support teacher, classroom aide, administrator and other salaries. Nearly eighty percent of the districts report that they use Chapter 1 funds to support specific salaries. In high-poverty districts, for example, close to ninety percent of the districts use Chapter 1 dollars to support teacher salaries.

Not only do most districts use Chapter 1 funds to support salaries, they spend the largest proportion of their funds on salaries. Exhibit 1.4 shows the proportion of the Chapter 1 budget that is reportedly allocated to specific expenditure categories, by poverty and achievement level of the school.[3] Across all poverty levels and across the three cohorts, expenditures on salaries are the most frequently indicated category. Salaries also account for the largest amount of Chapter 1 expenditures. As Exhibit 1.4 details, almost 80 percent of the Chapter 1 budget in low-poverty schools is allocated to salaries while the corresponding figure in high-poverty schools is about 74 percent.

Differences exist in how low- and high-poverty schools spend their Chapter 1 dollars within this salary category, however. Low-poverty schools spend a greater proportion of their Chapter 1 funds on teacher salaries than do high-poverty schools (55 vs 43 percent). At the same time, the high-poverty schools spend slightly more of their Chapter 1 dollars on administrator salaries, on classroom aides, and on other salaries. All told, high-poverty schools attended by first grade students spend close to thirty percent of their Chapter 1 dollars on these additional salary categories. Exhibit 1.5 graphs these expenditure patterns for low- and high-poverty schools, and for all schools.

STAFFING PATTERNS

Staffing patterns in low- and high-poverty schools appear to differ, according to the *Prospects* data. The number of students per total staff is lower in the high-poverty schools than in the low-poverty schools. Exhibit 1.6 provides the student-to-staffing ratio for particular staff as well as the total figures. The differences reported here are in contrast to those reported in Reinventing Chapter 1 (1993) which shows comparable student-to-staff ratios for low- and high-poverty schools, based on the NCES Schools and Staffing Survey (Exhibit 5, p. 27). The different conclusions from these two reports requires additional investigation in the future.

Exhibit 1.6 shows that high- and low-poverty schools follow different staffing patterns, with low-poverty schools having more teachers available and high-poverty schools having more classroom aides available. The *Prospects* data suggest that the student-to-regular teacher ratio is 22:1 in low-poverty

EXHIBIT 1.4

ALLOCATION OF CHAPTER 1 FUNDS TO SALARIES, STAFF DEVELOPMENT, COMPUTERS, AND MATERIALS BY POVERTY AND ACHIEVEMENT

PERCENT OF TOTAL FUNDS SPENT ON SPECIFIC AREAS:	0-19 % POVERTY	20-34 % POVERTY	35-49 % POVERTY	50-74 % POVERTY	75-100 % POVERTY	LOW ACH	MED ACH	HI ACH	LOW POV LOW ACH	LOW POV HI ACH	HI POV LOW ACH	HI POV HI ACH
COHORT 1												
Salaries	79.02	78.85	70.32	78.41	73.87	76.7	77.32	78.73	77.81	79.93	75.92	78.77
Staff development	2.12	1.03	1.87	1.00	1.58	1.55	1.33	1.41	2.04	2.42	1.75	1.05
Computers	2.64	2.49	7.82	3.91	2.83	3.56	3.49	2.87	3.34	2.24	3.03	2.14
Materials	5.33	5.51	5.47	4.00	6.25	5.35	4.90	5.14	6.52	4.76	6.67	5.26
Others	10.89	12.01	14.53	12.68	15.47	12.84	12.96	11.86	10.29	10.54	15.69	15.64
COHORT 3												
Salaries	81.19	74.74	68.44	78.30	73.24	74.44	77.19	78.48	81.38	81.58	72.40	74.79
Staff development	1.77	1.12	2.12	1.00	1.80	1.81	1.48	1.44	2.11	1.87	1.91	1.49
Computers	2.12	3.11	8.99	2.51	3.00	3.99	3.36	3.31	2.10	2.21	3.04	2.98
Materials	6.12	4.04	5.68	3.47	6.59	5.63	5.15	4.82	5.98	6.02	7.12	5.70
Others	8.80	17.00	14.77	14.72	15.37	14.13	12.82	11.95	8.43	8.32	15.05	15.05
COHORT 7												
Salaries	79.91	81.39	69.39	73.30	70.49	74.50	76.60	78.33	76.33	81.43	70.53	66.13
Staff development	1.57	.75	1.91	1.13	4.01	1.84	1.34	1.40	1.57	1.58	5.16	5.33
Computers	2.17	.88	7.42	3.30	1.30	3.25	3.16	2.89	2.55	2.03	1.14	3.10
Materials	4.54	4.49	5.15	5.58	6.78	5.72	4.89	4.15	5.92	4.06	7.11	4.72
Others	11.81	12.49	16.14	16.69	17.43	14.70	14.01	13.23	13.63	10.90	16.04	20.72

Source: *Prospects*, Characteristics of Schools and Programs Questionnaire

Exhibit 1.5

Allocation of Chapter 1 funds to specific salary categories, staff development, computers and materials for low and high poverty schools

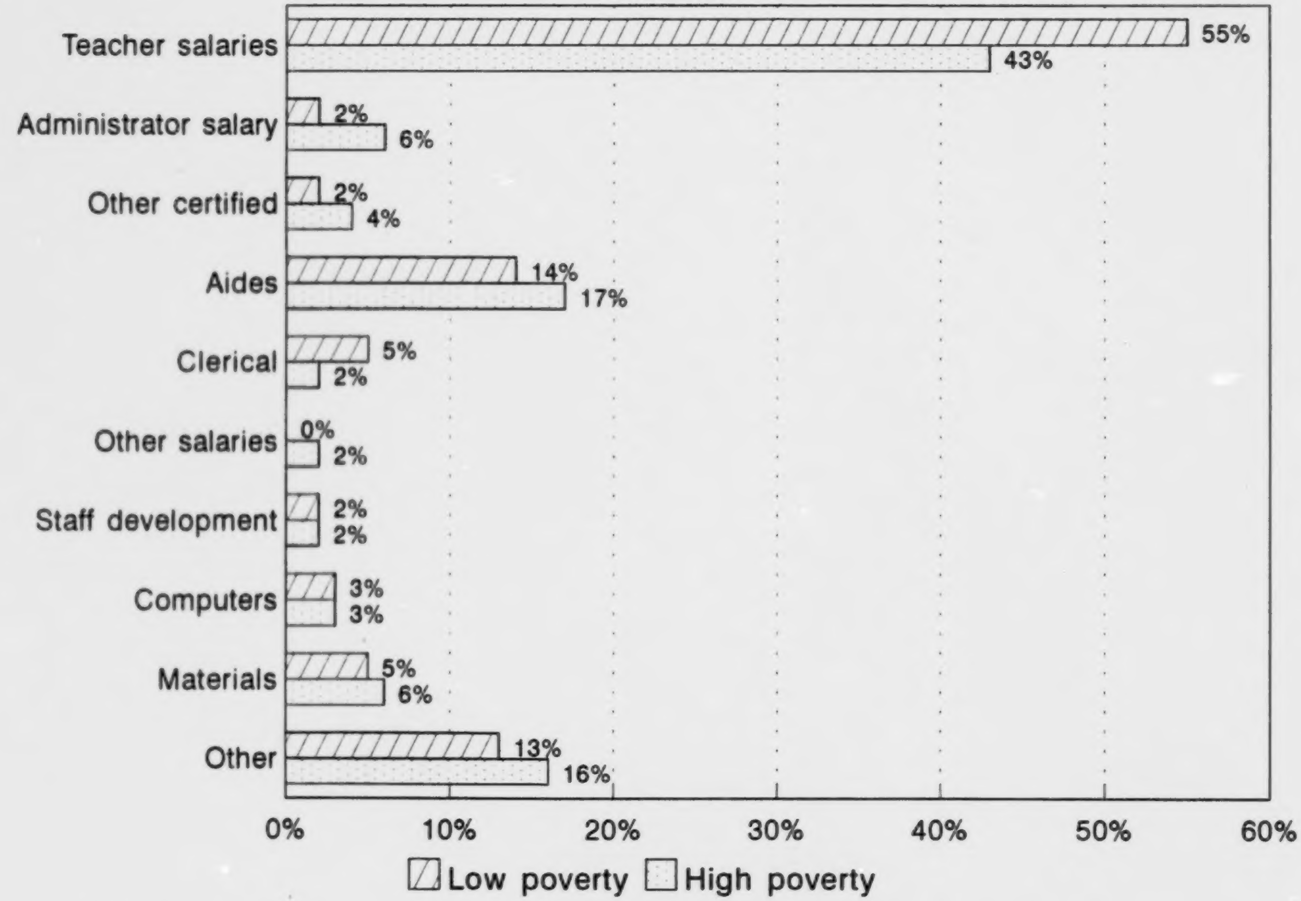


Exhibit reads: Grade 1 students in high poverty schools have 43 percent of Chapter 1 dollars allocated to teacher salaries.

Source: Prospects, Characteristics of Schools and Programs Questionnaire

EXHIBIT 1.6

STUDENT TO STAFFING RATIO IN LOW AND HIGH POVERTY SCHOOLS ATTENDED BY FIRST GRADE STUDENTS IN 1992 *PROSPECTS* DATA

Staff Title	Total	Low Poverty	High Poverty
Administrator	382.9	380.2	480.9
Regular Teacher	23.3	22.1	38.4
Remedial Teacher	301.6	298.5	282.3
Aides	160.2	241.2	144.2
Special Education Teachers	302.6	360.7	372.5
Special Education Aides	184.2	174.4	247.9
Parent Liaison	211.8	180.8	458.8
Social Workers	335.7	624.1	441.0
Counselors	426.5	708.3	365.7
Psychologists	534.3	1106.7	559.7
Librarians	596.6	545.7	557.6
ESL Teacher	431.8	890.3	146.8
ESL Aides	111.0	-	148.3
TOTAL	26.1	21.9	13.4

Exhibit reads: There were 380.2 students/administrator in low poverty schools attended by first grade students in the 1992 *Prospects* data in comparison to 480.9 students per administrator in high poverty schools attended by first graders.

Source: *Prospects*, Characteristics of Schools and Programs Questionnaire schools and 38:1 in high-poverty schools. Again, these estimates differ from those found in Reinventing Chapter 1 which reported ratios of 19:1 and 18:1 respectively for low- and high-poverty schools. The Chapter 1 implementation study (Millsap, Moss and Gamse, 1993) reports that the highest poverty schools have more students to teachers (37) than the low-poverty schools (24). The implementation study included aides and teachers. The results reported here are similar to those reported in the implementation study, but significantly different from those found in the School and Staffing Survey. Additional analyses are needed on this topic.[4]

These staffing patterns are important to understand because they provide the basis on which the Chapter 1 program is built and operated. The staffing pattern differences suggest that the Chapter 1 program will likely be different in low- and high-poverty schools simply because there are differing numbers of, and differing qualifications of, staff and teachers available. These staffing pattern differences are clearly an important context for proposals advocating specific reforms of Chapter 1.

STAFF EXPERIENCE, EDUCATION, AND CERTIFICATION[5]

Teaching Staff

The educational background and experience of the teaching staff are important influences on the quality of education experienced by the students. A traditional indicator of the quality of the learning environment is years of teaching experience. Both the mathematics and reading teachers average somewhere between 13 and 16 total years of experience teaching, and between eight and ten years experience teaching in the current school. There is no consistent relationship with school poverty, with the possible exception that reading teachers in the low-poverty schools tend to have slightly less experience.

Employment status: Most math and reading teachers are regular full-time employees, with little variation by cohort and school poverty concentration. One important exception is the 3-6 percent of students who have teachers who are not regular full-time employees. Students in high-poverty schools are more likely to have teachers who are permanent substitutes, while those in low-poverty schools are more likely to have teachers who are regular part-time employees.

Certification : Concerning certification of teachers, less than 1 percent of students have teachers who are not certified. However, up to 5.5 percent of students in high-poverty schools have math teachers who are not certified. More students in the third- and seventh-grade cohorts in high-poverty schools have teachers who are on temporary, provisional or emergency certification than in lower poverty schools.

Education: On the whole, the regular math and reading teachers are quite well educated. Across cohorts, between 40 and 50 percent of students have math and reading teachers with graduate degrees. The only substantial difference by poverty is that eighth grade students in high-poverty schools are more likely to have teachers who hold graduate degrees than those in low-poverty schools. This is particularly true for math teachers, where 53 percent of students in low-poverty schools have math teachers with a graduate degree, whereas 68 percent of students in high-poverty schools have such teachers.

School Principals

Most of the first graders attend schools where the principals have an average of about six years as principal in the current school. The length of time that a principal is at a school did not differ by poverty category. However, the principals of the high-poverty schools have slightly less overall experience as principal than the principals of lower poverty schools (12 vs 15 years). In terms of the number of years of teaching experience and poverty level of the school, the principals have roughly comparable experience across poverty level (18 years). Finally, the first graders are situated in schools in which the principals are highly educated, with 43 percent having a master's degree and 51 percent having schooling beyond a master's degree, but less than a doctorate. About three percent of the students in the first grade have principals who obtained a doctorate. Students in the first grade in high-poverty schools are slightly more likely to have a principal who earned a doctorate.

Principals of students in the eighth grade are in the present principalship an average of about 8 years. The principals in the high-poverty schools have fewer years experience in the current job than the principals in the lower poverty schools (4.7 vs 10.2) as well as fewer years of experience overall as a principal. The educational levels of the principals of the eighth grade students shows that at least 40 percent have a master's degree, 46 percent have completed work beyond a master's degree and about 12 percent have earned a doctoral degree.

DISCUSSION

Low- and high-poverty schools appear to have different staffing patterns in their schools. High-poverty schools have a lower student-to-staffing ratio than low-poverty schools. However, there are important differences in staffing within schools that need to be noted. In particular, high-poverty schools have higher student-to-regular teacher ratios than do low-poverty schools. The overall lower student-to-staff ratio in high-poverty schools is contributed to, not by the number of regular teachers, but by the number of classroom aides and administrators. This staffing pattern is significant for the operation of the regular classroom program, and Chapter 1 program, for it both limits and opens access to particular instructional strategies and practices. While schools and districts may make decisions about programs and then hire qualified staff to implement those models, it is also possible that schools and districts make funding decisions to cover existing personnel and then select models that are least disruptive to those existing funding and employment decisions. The significant point here is that it is likely that the staffing arrangements will be related to program operation.

ENDNOTES

1. Appendix A contains backup tables for this chapter.

2. The source for the school-level information is the Principal Questionnaire. When comparing district- and school-level information, it must be remembered that district coordinators report on practices in their district as a whole, while principals report directly about the practices in their schools. District and school level information may appear to conflict in certain cases. For example, when many schools within a few districts engage in a certain practice, district-level reports of the practice would be lower than the school-level report. Since the school is the most proximal environment for the child (as opposed to district), the school level variables are important for understanding environments as directly experienced by the child. However, the district-level variables are important for understanding the more distal settings that also may influence children's immediate environments.

3. The data source for Exhibit 1.4 is the district coordinator data. The specific question asked the district coordinator to indicate the dollar amount of the Chapter 1 budget that was allocated to these categories: salaries for teachers, salaries for administrators, salaries for other certified personnel, salaries for instructional aides, salaries for non-certified personnel, other salaries, staff development, computers, materials, all other.

4. Chapter 1 comprises a fairly small amount of the budget for these staff, estimated to be in the range of 1 to 5 percent.

5. Individuals who completed the Chapter 1 Teacher/Aide Questionnaire, and who identified themselves as aides, were instructed to skip the education, certification, and experience questions. Thus, we are able to present education and experience information only for Chapter 1 teachers (as opposed to aides), and the number of students with Chapter 1 teacher data is somewhat lower than the number of students who have Chapter 1 Teacher/Aide Questionnaire data. In fact, here we present information only for Chapter 1 teachers from the first-grade and third-grade cohorts. The number of Chapter 1 teachers in the seventh-grade cohort is too low to provide meaningful information.

CHAPTER II

INSTRUCTIONAL TIME

II. INSTRUCTIONAL TIME

OVERVIEW

How time is allocated and used in schools has been an enduring theme in studies of Chapter 1. One common goal in many Chapter 1 schools is to increase the time available for learning, both by providing additional instructional time and by improving the use of available instructional time. This chapter examines the extent and sources of variation in instructional time in schools and classrooms serving Chapter 1 students.

Key findings from this examination of time in school indicate that students in high-poverty schools have available more instructional time in math and reading than do students in low-poverty schools. Whether time is measured as days in the school year, time scheduled for instruction, time used for instruction, or time for additional instruction, students in high-poverty schools typically have more instructional time than do students in low-poverty schools in the key subject areas of math and English. Specific findings include:

- Substantially more time is allocated to reading than to math instruction for students in grades 1 and 4; at grade 8 about the same amount of time is allocated.
- The number of days in the school year is comparable across poverty level of the school.
- High-poverty schools allocate more time for reading and math instruction than do low-poverty schools.
- High-poverty schools and low-poverty schools utilize about the same proportion of the allocated time for instruction in grades 1 and 4. However, in grade 8, students in high-poverty schools are in classrooms where a smaller fraction of the allocated time is used for instruction in comparison to students in low-poverty schools.
- Students in high-poverty schools are more likely to have available to them opportunities that increase learning time outside of school through such avenues as before/after school programs and summer school than are students in low-poverty schools.
- High-poverty schools have more time allocated to Chapter 1 instruction than do low-poverty schools.
- High-poverty schools, considering Chapter 1 instruction, regular instruction and additional outside of school formal learning opportunities, have more instructional time in reading and math than do low-poverty schools.

OPPORTUNITIES TO LEARN

The time that a student has available for learning depends upon many factors, including the days in the school year, the hours in the school day, scheduling practices in use, attendance patterns, before/after school and summer programs, instructional efficiency, and homework. The total amount of time that a student spends actively engaged in learning is therefore determined by many features of the school, classroom, and home environments. There is appreciable variation in actual opportunities to learn, and these variations in learning time are important preconditions for student learning.

Days In the School Year and Days Attended

Throughout the United States, the length of the school year is generally set by state law and is typically 180 days. In the *Prospects* data, we find little variation across cohorts or school poverty levels in this basic time variable, the number of days in the school year.[1]

Student absence is an important factor that reduces the opportunity time for learning.[2] The average number of student days absent from school varies from about 5 days (in low-poverty schools in the first and fourth grade) to about 10 days (in high-poverty schools in the eighth grade).[3]

Exhibit 2.1 shows days in the school year and days attended by school poverty and grade.

Time Scheduled for Math and Reading

Exhibit 2.2 describes time allocated and used in reading and math instruction for grades 1, 4, and 8, by poverty level of the school. Several consistent patterns are seen in these data. First, there are large differences in the early grades between the time allocated for reading and math instruction, but these differences are not apparent at the eighth grade. First graders have about 88 minutes scheduled for reading and 39 minutes for math.

Secondly, the high-poverty schools, in comparison to the low-poverty schools, allocate slightly more time to reading and math instruction at all grade levels. These differences are largest at grade 8 in reading, where the high-poverty schools allocate an additional 10 minutes more for reading than do low-poverty schools.

Time Used for Math and Reading

Of the time that is scheduled for instruction, not all is actually used for instruction. Classroom interruptions, management activities and other down-time decrease the scheduled time to the amount actually used for instruction. Typically, about 60 to 70 percent of the scheduled time is actually used for instruction. The high-poverty and low-poverty schools are fairly similar in this usage rate, with the exception of classes in high-poverty eighth grades, which have lower rates than do low-poverty schools.

EXHIBIT 2.1
TIME ALLOCATED AND USED IN SCHOOL BY POVERTY STATUS OF THE SCHOOL

	SCHOOL POVERTY CONCENTRATION				
	0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT					
Days in school year[1]	177.7	179.1	179.2	177.6	179.5
Student days absent from school[2]	5.9	6.4	7.7	7.8	7.9
Average daily school attendance rate[3]	.81	.92	.89	.95	.88
Total Weighted N | 3,555,521	843,743	732,050	441,820	916,133	477,074
3RD GRADE COHORT					
Days in school year	177.91	180.16	179.36	178.07	179.84
Student days absent from school	5.49	5.68	6.46	6.64	6.80
Average daily school attendance rate	.87	.91	.90	.95	.91
Total Weighted N | 3,042,496	967,336	540,786	454,634	503,801	400,688
7TH GRADE COHORT					
Days in school year	178.15	179.12	179.12	180.63	180.87
Student days absent from school	6.64	7.15	8.15	9.74	10.02
Average daily school attendance rate	.96	.84	.87	.90	.88
Total Weighted N | 2,945,025	783,549	807,155	677,665	403,963	207,325

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[1] Characteristics of Schools and Programs, question B-3

[2] Student Abstract, question 14

[3] Characteristics of Schools and Programs, question B-2

EXHIBIT 2.2
AVERAGE TIME ALLOCATED AND USED FOR READING AND MATH

	SCHOOL POVERTY CONCENTRATION				
	0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT					
Minutes scheduled regular reading instruction[1]	83	88	100	70	89
Minutes scheduled regular math instruction[2]	39	34	37	34	41
Actual minutes reading instruction per day[3]	60	62	70	49	63
Actual minutes mathematics instruction per day[4]	28	24	26	24	29
Total Weighted N | 3,555,521	843,743	732,050	441,820	916,133	477,074
3RD GRADE COHORT					
Minutes regular reading instruction	71	82	70	61	76
Minutes regular math instruction	48	47	42	46	47
Actual minutes reading instruction per day	50	57	50	42	54
Actual minutes mathematics instruction per day	33	33	30	31	33
Total Weighted N | 3,042,496	967,336	540,786	454,634	503,801	400,688
7TH GRADE COHORT					
Minutes regular reading instruction	31	29	30	31	41
Minutes regular math instruction	29	43	36	30	31
Actual minutes reading instruction per day	21	19	22	20	27
Actual minutes mathematics instruction per day	19	30	26	21	19
Total Weighted N | 2,945,025	783,549	807,155	677,665	403,963	207,325

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[1] Regular Teacher Questionnaire, L-6, L-7

[2] Regular Teacher Questionnaire, I-5, I-6

[3] Regular Teacher Questionnaire, B-1, L-6, L-7

[4] Regular Teacher Questionnaire, B-1, I-5, I-6

The actual minutes of reading and math instruction are obtained by multiplying the time scheduled by these use rates. Within subjects and grades, the number of minutes used for instruction is typically greater in high-poverty than low-poverty schools. The largest differences are in the eighth grade, where the high-poverty schools have 6 more minutes daily of actual reading instruction.

The actual instructional minutes in rows 3 and 4 of Exhibit 2.2 pertain to **daily** instruction. The total amount of instructional time received is influenced as well by the number of days attended. After adjusting for days in session and days absent, the high-poverty schools still appear to have more instructional time than the low-poverty schools, with the exception of grade eight students in mathematics. The high-poverty schools, for example, in the first grade have 180 hours of regular reading instruction over the course of the year while the low-poverty schools have 172 hours. At grade 8, the high-poverty schools have 75 hours of regular reading instruction, in comparison to 60 hours for the low-poverty schools. These figures suggest that students in high-poverty schools receive more instructional time than do students in low-poverty schools. Exhibits 2.3 and 2.4 graph the hours of reading and math instructional time by school poverty level.

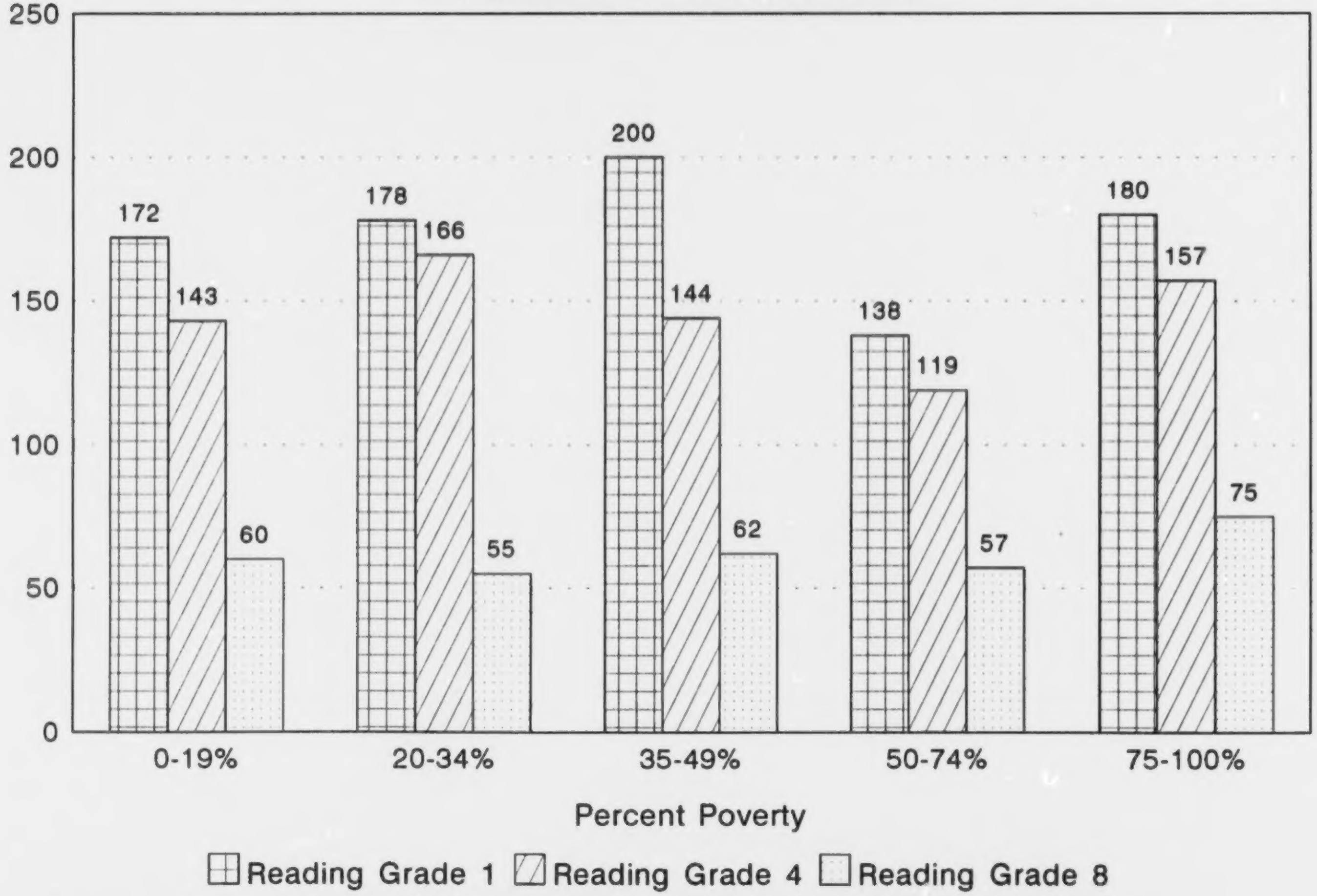
These results suggest that the regular math and reading instructional time may be slightly higher in high-poverty schools, with instructional time for high-poverty schools slightly exceeding those in low-poverty schools.

ADDITIONAL OPPORTUNITY TIME

In addition to the actual instructional time that is provided during the school day, a variety of strategies are used by schools, teachers and parents to increase learning time. For instance, provision of summer school, provision of tutoring before and after school, and involvement in homework, can all influence the amount of time a student spends learning. Exhibit 2.5 shows the percentage of students who gain additional time by use of these strategies.

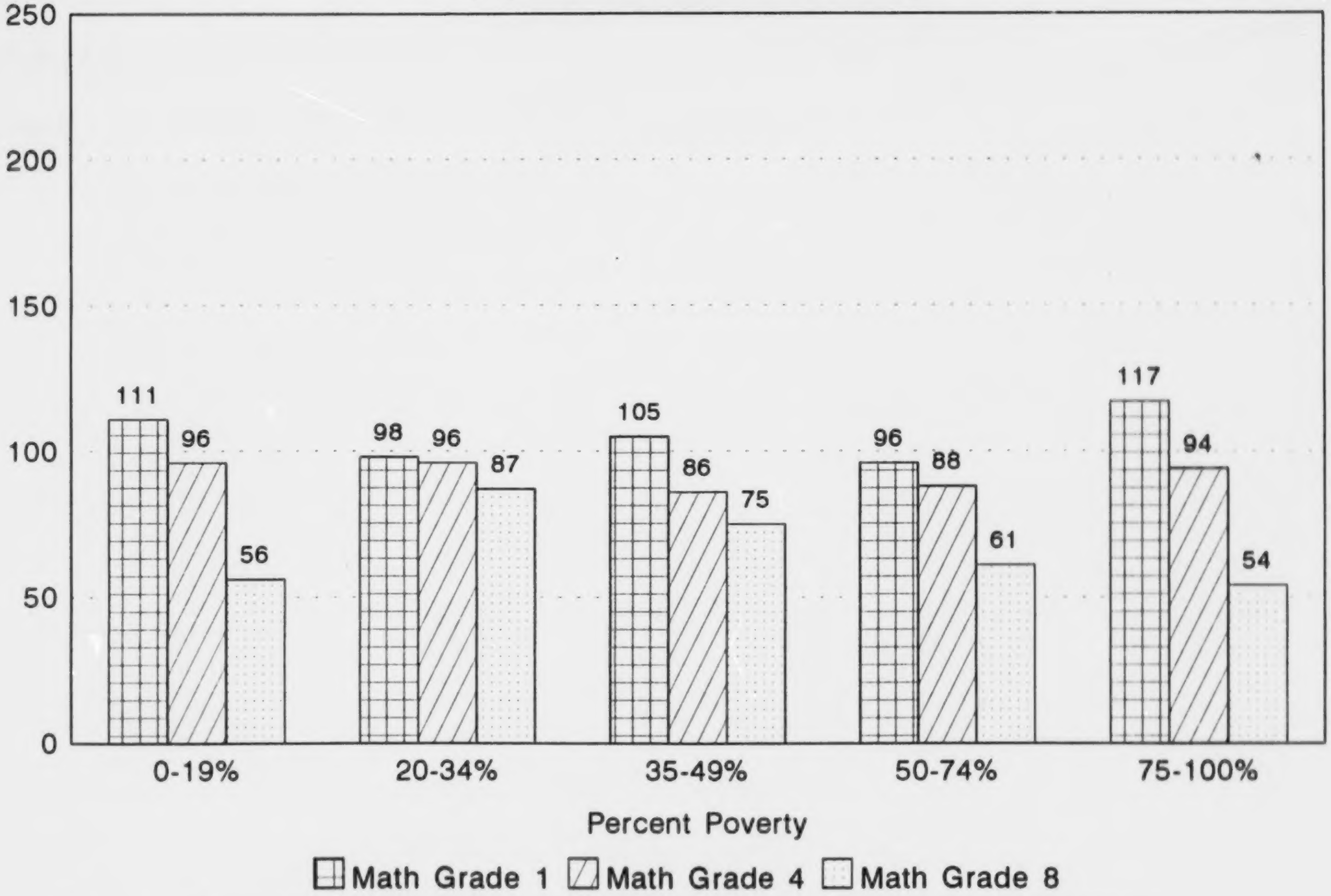
Students in high-poverty schools are much more likely to attend summer programs than are students in low-poverty schools. About 10 percent of the first graders in high-poverty schools attended summer school in contrast to 3 percent of the first graders in low-poverty schools. In general, the high-poverty schools appear to involve more students in activities that increase learning time and to hold these activities for a longer amount of time than do low-poverty schools. In addition, parents of first and third graders report their children spend 61 and 81 minutes on homework nightly in contrast to 48 and 71 minutes for students in low-poverty schools. However, eighth graders in high-poverty schools spend about 10 minutes less than their peers in low-poverty schools on homework.

Exhibit 2.3
Hours Reading Instruction per year
by grade and school poverty



Source: Prospects, Composite from Characteristics of Schools and Programs, and Regular Teacher Questionnaires

Exhibit 2.4
Hours Math Instruction per year by grade and school poverty



Source: Prospects, Composite from Characterstics of Schools and Programs, and Regular Teacher Questionnaires

EXHIBIT 2.5
ADDITIONAL TIME IN SCHOOL DUE TO SUMMER SCHOOL, BEFORE/AFTER SCHOOL TUTORING AND HOMEWORK

	SCHOOL POVERTY CONCENTRATION				
	0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT					
Percent attended summer school[1]	3.2	3.0	2.2	7.9	10.1
Percent of students whose teacher tutored reading before or after school[2]	38.0	49.7	49.2	42.0	43.3
Percent of students whose teacher tutored math before or after school[3]	40.5	51.0	49.2	42.0	61.9
Minutes spent tutoring reading[4]	5	5	5	8	10
Minutes spent tutoring math[5]	5	5	5	8	10
Minutes parents report children spend on homework[6]	48	50	56	60	61
Total Weighted N | 3,555,521	843,743	732,050	441,820	916,133	477,074
3RD GRADE COHORT					
Percent attended summer school	5.7	4.0	3.1	5.9	11.4
Percent of students whose teacher tutored reading before or after school	51.7	53.8	52.5	53.5	64.7
Percent of students whose teacher tutored math before or after school	57.3	56.8	56.8	54.1	67.3
Minutes spent tutoring reading	6	7	6	10	13
Minutes spent tutoring math	7	7	6	11	14
Minutes parents report children spend on homework	71	78	74	80	81
Total Weighted N | 3,042,496	967,336	540,786	454,634	503,801	400,688

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[1] Student Abstract, 23i

[2] Regular Teacher, question F-17i

[3] Regular Teacher, question F-17i

[4] Regular Teacher, question F-17i

[5] Regular Teacher, question F-17i

[6] Parent Questionnaire, question 14

	SCHOOL POVERTY CONCENTRATION				
	0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
7TH GRADE COHORT					
Percent attended summer school	5.4	3.8	6.7	10.1	14.3
Percent of students whose teacher tutored reading before or after school	59.0	58.9	68.1	56.5	69.2
Percent of students whose teacher tutored math before or after school	61.7	86.4	82.2	68.9	63.2
Minutes spent tutoring reading	10	8	8	11	22
Minutes spent tutoring math	9	18	10	11	9
Minutes parents report children spend on homework	95	78	90	88	86
Total Weighted N | 2,945,025	783,549	807,155	677,665	403,963	207,325

This pattern of results suggests that students in high-poverty schools, in comparison to students in low-poverty schools, increase their instructional time to a greater extent through these settings and activities that occur beyond the regular school day.

CHAPTER 1 INSTRUCTIONAL TIME

Chapter 1 instruction provides a major avenue through which additional opportunities for learning are provided. Here we examine the number of minutes per day added by Chapter 1 instruction and the connection between Chapter 1 and regular instructional time. Exhibits 2.6 and 2.7 present the amount of time spent in Chapter 1 instruction, the amount of time missed from regular instruction to participate in Chapter 1 instruction, and an estimate of the total time available for instruction in reading and math from Chapter 1 and regular instruction.

The average minutes of Chapter 1 instructional time per day varies with the percent poverty of the school. In reading, students in high-poverty schools participate for more minutes in Chapter 1 than do students in low-poverty schools. These results are similar to those reported in the Chapter 1 Implementation study which found that students in high-poverty schools participate in Chapter 1 for about 40 minutes, while students in low-poverty schools participate on average for about 32 minutes.

The results for math instruction are similar, with the exception of Grade 8. Grade 1 students in high-poverty schools receive 30 minutes of Chapter 1 math instruction. Grade 1 students in low-poverty schools receive about 17 minutes of Chapter 1 math instruction. The Chapter 1 time for grade 8 mathematics, however, did not show any difference with respect to poverty.

In order to receive Chapter 1 instruction, students typically must miss at least some of their regular instruction. The Implementation Study finds that 70 percent of teachers report that students miss some regular instructional time to participate in Chapter 1. In the *Prospects* data, about 80 percent of the first graders have teachers who report that they miss regular instruction for Chapter 1, about 55 percent of fourth graders so report, as do 50 percent of eighth graders. The estimates of total time missed for Chapter 1 show an interesting relationship with school poverty. Students in high-poverty schools miss the least number of minutes of regular instruction as a result of receiving Chapter 1 services.

Two different factors may account for this lower rate for the high-poverty schools. First, the schools that utilize schoolwide projects are included in this category. One of the goals of schoolwide projects is to eliminate the problems posed by coordination with Chapter 1 pull-out instruction. In theory, the schoolwide projects may use pull-out less often, and may make less of a distinction between regular and Chapter 1 instruction. To see if this might be the case, we recalculated the instructional time

EXHIBIT 2.6
AVERAGE TIME ALLOCATED TO READING BY REGULAR AND CHAPTER 1 TEACHERS AND ESTIMATE OF TOTAL INSTRUCTIONAL TIME

	SCHOOL POVERTY CONCENTRATION				
	0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT					
Minutes of regular reading instruction/day[1]	83	88	100	70	89
Minutes of Chapter 1 reading instruction/day[2]	21	22	40	26	35
Estimate of regular class time missed for Chapter 1 reading[3]	16	18	25	20	7
Estimate of maximum total reading instructional time using estimated lost time[4]	88	92	115	76	117
Total weighted N | 3,555,521	843,743	732,050	441,820	916,133	477,074
3RD GRADE COHORT					
Minutes of regular reading instruction/day	71	82	70	61	76
Minutes of Chapter 1 reading instruction/day	23	30	29	43	41
Estimate of regular class time missed for Chapter 1 reading	16	16	32	22	8
Estimate of maximum total reading instructional time using estimated lost time	78	95	67	82	109
Total Weighted N | 3,042,496	967,336	540,786	454,634	503,801	400,688
7TH GRADE COHORT					
Minutes of regular reading instruction/Day	31	29	30	31	41
Minutes of Chapter 1 reading instruction/day	17	35	42	48	56
Estimate of regular class time missed for Chapter 1 reading	1	24	27	13	4
Estimate of maximum total reading instructional time using estimated lost time	47	40	45	66	93
Total Weighted N | 2,945,025	783,549	807,155	677,665	403,963	207,325

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[1] Regular Teacher Questionnaire, L-5, L-6

[2] Chapter 1 Teacher Questionnaire, J-7, J-8, J-9

[3] Regular Teacher Questionnaire K-7

[4] The rough estimate of the maximum daily total reading instructional time was calculated by adding the minutes of regular and chapter 1 instructional time, and then subtracting the estimate of the minutes of regular class time missed.

EXHIBIT 2.7
AVERAGE TIME ALLOCATED TO MATHEMATICS BY REGULAR AND CHAPTER 1 TEACHERS AND ESTIMATE OF TOTAL INSTRUCTIONAL TIME

	SCHOOL POVERTY CONCENTRATION				
	0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT					
Minutes of regular mathematics/day[1]	39	34	37	34	41
Minutes of Chapter 1 math instruction/day[2]	17	19	29	28	30
Estimate of regular class time missed for Chapter 1 math[3]	4	3	17	5	4
Estimate of maximum total math instructional time using estimated lost time[4]	52	50	49	62	67
Total weighted N | 3,555,521	843,743	732,050	441,820	916,133	477,074
3RD GRADE COHORT					
Minutes of regular mathematics/day	48	47	42	46	47
Minutes of Chapter 1 math instruction/day	18	26	28	36	3
Estimate of regular class time missed for Chapter 1 math	9	4	29	14	9
Estimate of maximum total math instructional time using estimated lost time	57	69	41	68	41
Total Weighted N | 3,042,496	967,336	540,786	454,634	503,801	400,688
7TH GRADE COHORT					
Minutes of regular mathematics/day	29	43	36	30	31
Minutes of Chapter 1 math instruction/day	30	24	36	46	31
Estimate of regular class time missed for Chapter 1 math	0	15	9	8	1
Estimate of maximum total math instructional time using estimated lost time	59	52	63	68	61
Total Weighted N | 2,945,025	783,549	807,155	677,665	403,963	207,325

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[1] Regular Teacher Questionnaire, I-5, I-6

[2] Chapter 1 Teacher Questionnaire, H-6, H-7, H-8

[3] Regular Teacher Questionnaire, H-6

[4] The rough estimate of the maximum daily total math instructional time was calculated by adding the minutes of regular and chapter 1 instructional time, and then subtracting the estimate of the minutes of regular class time missed.

patterns by separating the high-poverty category into schoolwide and non-schoolwide categories. With respect to mathematics time lost, the schoolwide programs have zero minutes lost, as we expected. However, on the reading time lost, this pattern was not found. The schoolwides and non-schoolwides lose about the same number of minutes (7.5 vs. 6.8 respectively). It is not clear what the schoolwide projects are doing or are not doing that actually produce this pattern of results.

Another factor at work here is the greater use of in-class programs in the high-poverty schools. In-class programs can, in theory, reduce the coordination issues and the amount of time lost. The regular teachers indicate how many students have Chapter 1 instruction within the classroom, and for how long this instruction takes place. They also indicate how many students participate in instruction outside the classroom, and for how long that takes place. In Exhibits 2.8 and 2.9 we provide these figures for math and reading instruction.

High-poverty schools have the greatest number of students receiving services within the class. These numbers also differ by schoolwide or non-schoolwide status (see right hand columns). The non-schoolwides have an average of 7.2 and 7.1 students receiving services in math and English, while the schoolwide figures are 19.6 and 16.4, respectively. The biggest impact of the schoolwide status evident in these tables, however, is in the minutes of instruction that are received inside the classroom. The schoolwide classes have an average of 112 minutes of reading instruction per day inside the class, while the non-schoolwide have 47 minutes. We interpret this to mean that the total instructional time is 112 minutes per day for the schoolwide, and that this average reflects instructional time irrespective of such designations as "regular" or "Chapter 1" time. However, we do not know from this survey in sufficient detail what arrangements of services actually take place within the schoolwide classrooms.

The total amount of instructional time that children receive, therefore, remains a difficult factor to calculate with precision. A rough estimate is obtained by adding Chapter 1 and regular instructional time and deducting the time lost from regular instruction for receipt of Chapter 1. The last rows of tables 2.6 and 2.7 present this estimate. Using this calculation, the total amount of instructional time, with some exceptions, appears to be highest in the high-poverty schools.

DISCUSSION

This chapter examines the allocation and use of instructional time in Chapter 1 schools. On most measures of instructional time, the high-poverty schools allocate and use more instructional time than do the low-poverty schools.

EXHIBIT 2.8
NUMBER OF STUDENTS RECEIVING CHAPTER 1 SERVICES IN MATH INSIDE AND OUTSIDE OF THE REGULAR CLASSROOM AND THE AVERAGE MINUTES OF REGULAR MATH MISSED

FACTOR: MATH INSTRUCTION	SCHOOL POVERTY CONCENTRATION					NOT SW	SW
	0-19%	20-34%	35-49%	50-74%	75-100%		
1ST GRADE COHORT							
#Students Ch1 inside class[1]	2	1	5	5	13	7	20
#minutes/day inside[2]	17	18	33	46	47	37	55
#students Ch1 math outside class[3]	2	3	2	3	3	3	2
#minutes/day outside[4]	20	21	32	27	30	25	45
#minutes/day regular instruction missed[5]	4	3	17	5	4	6	0
Total Weighted N | 3,555,521	843,743	732,050	441,820	916,133	477,074	350,792	126,281
3RD GRADE COHORT							
#students Ch1 inside class	2	1	3	3	10	67	18
#minutes/day inside	80	33	40	32	43	35	54
#students Ch1 math outside class	2	3	4	5	6	4	8
#minutes/day outside	14	22	29	33	31	35	22
#minutes/day regular instruction missed	9	4	29	14	8	12	5
Total Weighted N | 3,042,496	967,336	540,786	454,634	503,801	400,688	301,920	98,768
7TH GRADE COHORT							
#students Ch1 inside class	2	1	2	15	54	52	72
#minutes/day inside	49	55	31	48	54	54	50
#students Ch1 math outside class	6	13	14	9	3	3	0
#minutes/day outside	27	18	38	37	47	47	0
#minutes/day regular instruction missed	0	15	9	8	1	1	0
Total Weighted N | 2,945,025	783,549	807,155	677,665	403,963	207,325	203,277	4,048

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[1] Regular Teacher Questionnire, H-2

[2] Regular Teacher Questionnire, H-3a, b

[3] Regular Teacher Questionnire, H-4

[4] Regular Teacher Questionnire, H-5a, b

[5] Regular Teacher Questionnire, H-7

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EXHIBIT 2.9
NUMBER OF STUDENTS RECEIVING CHAPTER 1 SERVICES IN ENGLISH INSIDE AND OUTSIDE OF THE REGULAR CLASSROOM AND THE AVERAGE MINUTES OF REGULAR ENGLISH MISSED

FACTOR - ENGLISH INSTRUCTION	SCHOOL POVERTY CONCENTRATION					NOT SW	SW
	0-19%	20-34%	35-49%	50-74%	75-100%		
1ST GRADE COHORT							
#students Ch1 inside class[1]	1	1	3	3	10	7	16
#minutes/day inside[2]	60	20	60	71	67	47	112
#students Ch1 outside class[3]	3	4	3	5	5	5	5
#minutes/day outside[4]	20	28	33	31	36	36	39
#minutes/day regular instruction missed[5]	16	18	25	20	7	7	8
Total Weighted N 3,555,521	843,743	732,050	441,820	916,133	477,074	350,792	126,281
3RD GRADE COHORT							
#students Ch1 inside class	1	1	2	3	11	8	17
#minutes/day inside	16	45	42	58	73	56	101
#students Ch1 outside class	2	3	5	4	7	5	13
#minutes/day outside	30	25	38	31	44	38	59
#minutes/day regular instruction missed	16	16	32	22	8	7	11
Total Weighted N 3,042,496	967,336	540,786	454,634	503,801	400,688	301,920	98,768
7TH GRADE COHORT							
#students Ch1 inside class	8	2	5	10	27	29	0
#minutes/day inside	26	46	36	50	37	37	0
#students Ch1 outside class	5	6	15	13	23	16	120
#minutes/day outside	43	34	51	43	47	47	50
#minutes/day regular instruction missed	1	24	27	13	4	4	0
Total Weighted N 2,945,025	783,549	807,155	677,665	403,963	207,325	203,277	4,048

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[1] Regular Teacher Questionnire, K-2

[2] Regular Teacher Questionnire, K-3a, b

[3] Regular Teacher Questionnire, K-4

[4] Regular Teacher Questionnire, K-5a, b

[5] Regular Teacher Questionnire, K-7

Greater instructional time in high-poverty schools is consistent with other recent studies that have looked at time use, such as the Implementation Study, although this conclusion is probably not in keeping with conventional characterization of high- and low-poverty schools. At issue, however, is whether the additional number of hours and minutes documented here are of consequence. Certainly, that depends upon the quality and nature of the activities that take place during the instructional time, a topic addressed in the next chapters on service arrangements, curriculum and instruction.

ENDNOTES

1. The Characteristics of Schools and Programs questionnaire asked the respondent for the number of days that the school was in session. It qualified this question by specifying the number of days when the students and teachers were both present. This number could be fewer than the legal days as a result of permissible school closing due to weather or other factors.

2. We estimate the extent of student absence from two measures, the average number of students attending daily as reported in the Characteristics of Schools and Programs questionnaire, and days absent reported on the Student Abstract. The student measure and the school measure are likely to produce different rates as the student measure did not record actual days, but categories representing a range of days. The top category was 30 or more days. We used the median of each category to produce the estimates of days lost to absence.

3. This number is likely to underrepresent the amount of absence because of the manner in which the response categories were converted to a continuous variable. The maximum number of days absent was 30+ which was coded as a 30 when the continuous variable was created.

CHAPTER III

ARRANGEMENT OF CHAPTER 1 SERVICES

III. ARRANGEMENT OF CHAPTER 1 SERVICES

OVERVIEW

This chapter describes how Chapter 1 services are provided. Specific attention is paid to the service delivery model utilized (pull-out, add-on, schoolwide, replacement, and in-class), to staffing and grouping arrangements used, to subject matter taught, and the type of services provided. The major findings from this chapter are:

Service Delivery Models

- The most predominantly used instructional delivery model remains pull-out. Low-poverty schools utilize limited pull-out to a much greater extent than do high-poverty schools.
- In-class models are the second most frequently used service delivery format. About one quarter of first graders attend schools in districts that utilize this approach as their main service delivery option. About one-third of first grade students receive Chapter 1 reading services in their regular classroom. High-poverty schools are more likely to use in-class models than are low-poverty schools.
- High-poverty schools are far more likely to use more than one service delivery model than are low-poverty schools (35 vs 17 percent at the first grade).
- Limited pull-out is utilized in reading instruction to a much greater degree than it is in math or in language arts instruction.

Subject Matter and Services

- Most students who participate in Chapter 1 receive Chapter 1 services in reading. Of the students participating in Chapter 1, 96 percent of first graders, 83 percent of fourth graders, and 81 percent of eighth graders participate in reading. About thirty percent of first graders receive services in both reading and math. The corresponding figures for grades four and eight are thirty-seven and twenty-two percent, respectively.
- Participation in both reading and math is consistently related to school poverty. In the first grade, a greater percentage of students in high-poverty schools participate in Chapter 1 support in both reading and math than do participants in low-poverty schools (39 vs 29 percent). For grades 4 and 8, a greater percentage of students in high-poverty schools in comparison to low-poverty participate in both reading and math.

- Relatively few Chapter 1 participants receive services in non-instructional areas, such as counseling or health (around 3 percent).

Staffing

- About 80 percent of first grade students are in schools in which Chapter 1 reading services are provided either by a Chapter 1 teacher (45 percent) or by a Chapter 1 teacher and aide (38 percent).

- Although the pupil to staff ratios are similar in low- and high-poverty schools, staffing arrangements differ. A greater proportion of the staff is made up by aides in high-poverty schools than it is in low-poverty schools. Teachers make up a greater proportion of staff in low-poverty schools in comparison to high-poverty schools.

- The aides assume different responsibilities in low- and high-poverty schools. Aides in low-poverty schools are more likely to have responsibility only for non-instructional tasks while aides in high-poverty schools have responsibilities for instructional as well as non-instructional tasks.

Time

- Students in high-poverty schools are more likely to receive services 5 days per week than are students in low-poverty schools (80 percent vs 47 percent in reading). Students in high-poverty schools who participate in pull-out programs receive Chapter 1 instruction five days per week with greater frequency than those who are in an in-class program (90 percent vs 78 percent).

- Appreciable differences in the amount of time used for Chapter 1 instruction exists across poverty categories. In general, students in high-poverty schools receive more Chapter 1 instruction than do students in low-poverty schools. There are also important differences within poverty categories by service delivery model in the amount of time students receive instruction. Student in in-class arrangements receive about 5 minutes more per day of academic time than do students in pull-out programs.

Materials

- In elementary grades, the Chapter 1 math and the regular teacher are likely to use the same materials at the same level. However, the Chapter 1 reading teachers report more often that they utilize different materials, but at the same instructional level.

Chapter 1 Instructional Grouping Practices

- The dominant practice in Chapter 1 math is whole class instruction. In Chapter 1 reading, within-class grouping was used slightly more often than whole class instruction.

CHAPTER 1 INSTRUCTIONAL DELIVERY MODELS

Five instructional delivery models comprise the basic modes of delivering services to Chapter 1 students: in-class model (reinforces regular instruction within the regular classroom), limited pull-out (supplements regular instruction with instruction received outside the regular classroom), replacement class (replaces the regular instruction with another curriculum), add-on projects (adds additional time for instruction, for example, by summer school or before or after school programs), and schoolwide projects (Chapter 1 services support the whole school; schools with more than 75 percent Chapter 1 students are eligible).

The *Prospects* data provide three sources of information about service delivery — at the district, school, and teacher level. At the district level, the *Prospects* data indicate the predominant service delivery model in use in the district. The responses at the school level indicate all models that are utilized within the school. Finally, the Chapter 1 teachers/aides indicate all models used in Chapter 1 instruction. These three sources provide information, then, about any use of a particular model, as well as data on predominant use.

Pull-out

Instruction in pull-out format typically consists of group instruction, separate from the regular classroom, conducted by a Chapter 1 teacher or aide, for a period of 30 minutes, five days a week (Millsap, Moss and Gamse, 1993). Criticisms of pull-out instruction include the stigmatization of children who are pulled out, disruption to the regular classroom because of the pull-out, lack of coordination of pull-out and regular classroom instruction, and concerns over quality of the instruction received during pull-out. Pringle, Rubenstein and Janger (1993) indicate that the use of limited pull-out declined from 1985 through 1991. In 1985 about 84 percent of elementary schools utilized limited pull-out, while in 1991-1992 about 74 percent of elementary schools used this model. However, according to the Chapter 1 Implementation Study (Millsap, Moss and Gamse, 1993), limited pull-out remains the most prevalent format for delivery of Chapter 1 services.

Turning to the *Prospects* data, Exhibit 3.1 displays the percentage of students in districts in which a specific service delivery model (limited pull-out, in-class, extended pull-out, add-on projects, replacement, schoolwide, and preschool) is identified as the predominant approach in the district.[1] Limited pull-out remains the most prevalent format reported by district coordinators, and about one-half of the first graders are in districts where limited pull-out remains the predominant approach. School poverty level is related to the prevalence of use of pull-out models. Students in low-poverty schools are about twice as likely to be in districts that use limited pull-out as the predominant approach as are

Exhibit 3.1

Predominant Chapter 1 service delivery model

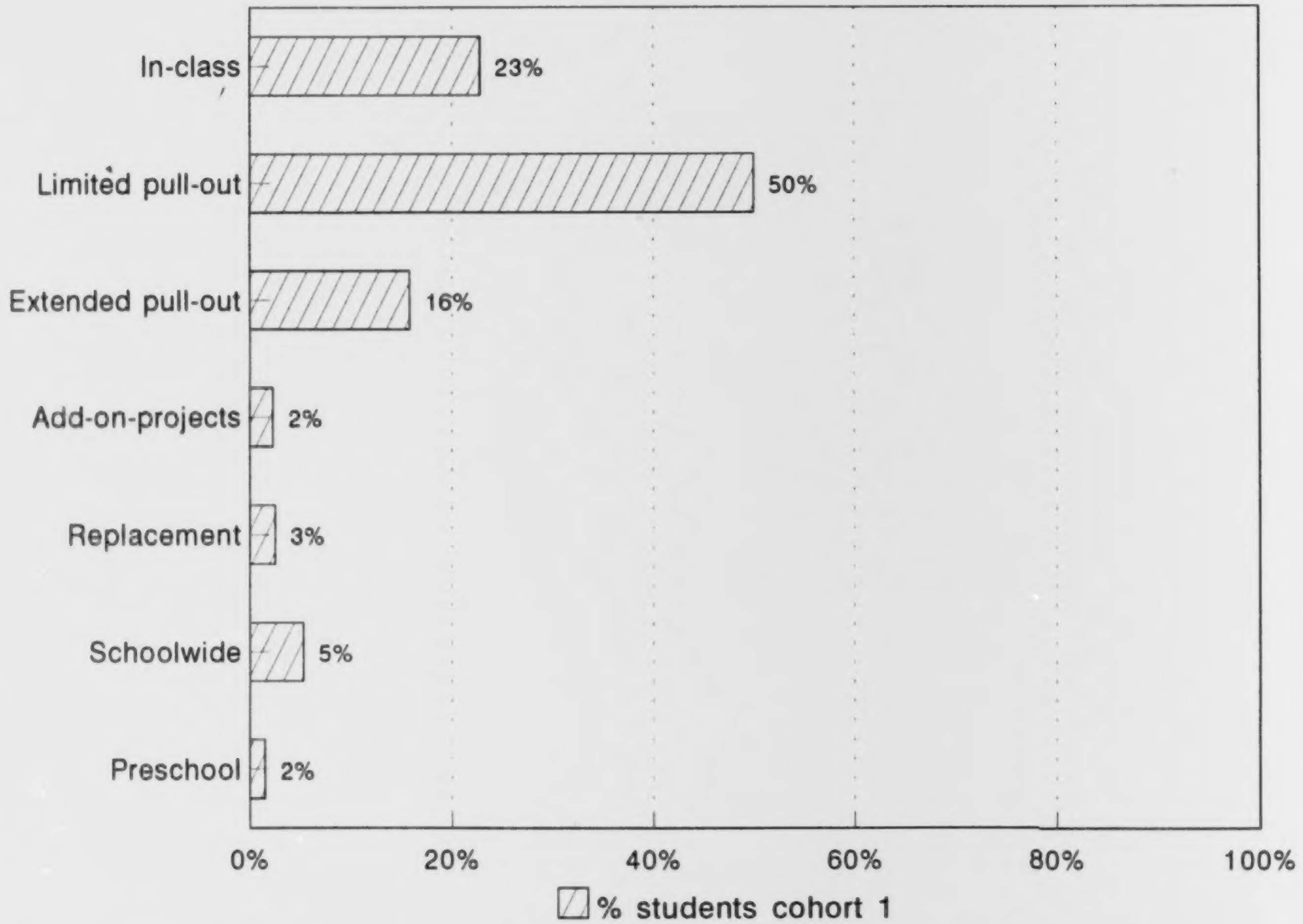

Exhibit reads: 50% of first-graders are in districts that use limited pull-out as the predominant Chapter 1 service delivery model.

Source: Prospects, District Coordinator Questionnaire

students in high-poverty schools (see Exhibits 3.2 and 3.3). Roughly seventy percent of first graders in low-poverty schools are in districts that utilize limited pull-out as the predominant model while about a third of first graders in high-poverty schools are in districts that predominantly use this format.

Exhibit 3.4 shows the percentage of first grade students who are in schools that report any use of in-class, pull-out, replacement, add-on or schoolwide service delivery models. Again, limited pull-out remains a frequently used approach, and one that is used much more often in Chapter 1 reading than it is in Chapter 1 math.

Finally, the Chapter 1 teachers/aides similarly report a high use of pull-out as a format for Chapter 1 services. About seventy percent of first grade students have Chapter 1 teachers who report at least some use of the pull-out format. Some sixty-eight percent of the students' Chapter 1 math teacher report using pull-out and about seventy-three percent of the reading teachers so report. In high-poverty schools, pull-out is more likely to be used for Chapter 1 math instruction than it is for Chapter 1 reading instruction (61 percent vs 38 percent of first graders have Chapter 1 teachers who so responded.)[2]

This examination of responses from the district, school and teacher level paint a consistent picture of continuing reliance to a large degree on the limited pull-out delivery model.[3] However, differences by poverty level of the school are found in which low-poverty schools utilize pull-out to a greater extent than do high-poverty schools. Chapter 1 reading instruction is also more likely than math instruction to take place in a limited pull-out format.

In-class

The in-class model of service delivery has increased in use over the last decade (Pringle, Rubenstein and Janger, 1993), especially in high-poverty schools. In this model, students receive their Chapter 1 services while remaining in the regular classroom. The advantages of this model include more efficient use of time, fewer classroom disruptions, less stigmatization of students, and better coordination of services.

Nearly one-quarter of first grade students are in districts where in-class instruction is the predominant form of service delivery (see Exhibit 3.1). Looking at the percentage of students who are in schools that have at least some use of in-class programs, some 37, 24, and 32 percent of first, fourth, and eighth graders, respectively, are in such schools.

Students in high-poverty schools are more likely to be in districts and classrooms where the in-class delivery model is used than are corresponding students in low-poverty schools. Thirty-five percent of the first graders in high-poverty schools are in districts that utilize in-class projects as their **main** approach; twenty-five percent of first graders in low-poverty schools are so located. Looking at the

Exhibit 3.2

Predominant Chapter 1 service delivery mod
Low-poverty schools

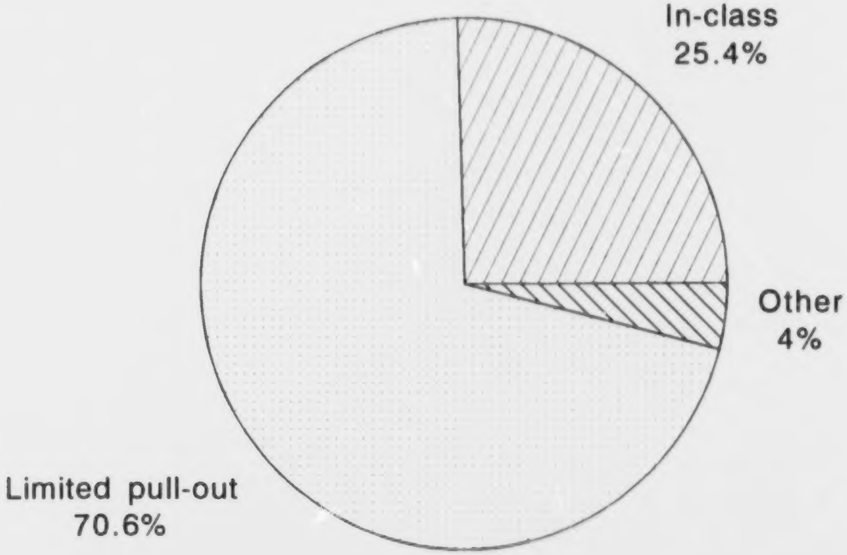

Exhibit reads: 70.6% of first-graders in low-poverty schools are i
that use limited pull-out as a Chapter 1 service del

Source: Prospects, District Coordinator Questionnaire

Exhibit 3.3

Predominant Chapter 1 service delivery model
High-poverty schools

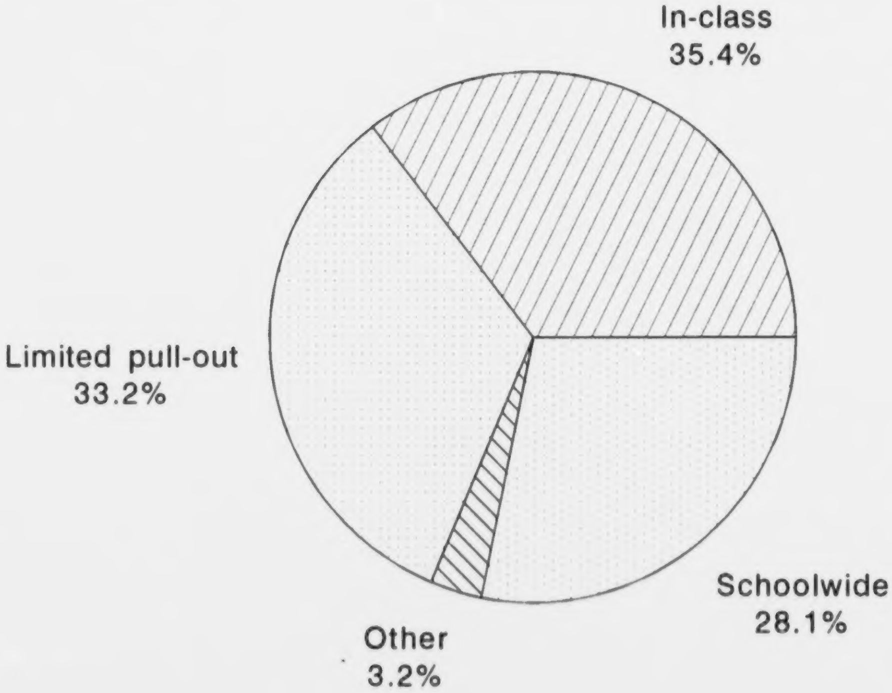

Exhibit reads: 33.2% of first-graders in high-poverty schools are in districts that use limited pull-out as a Chapter 1 service delivery model.

Source: Prospects, District Coordinator Questionnaire

Exhibit 3.4

Chapter 1 service delivery models by subject matter

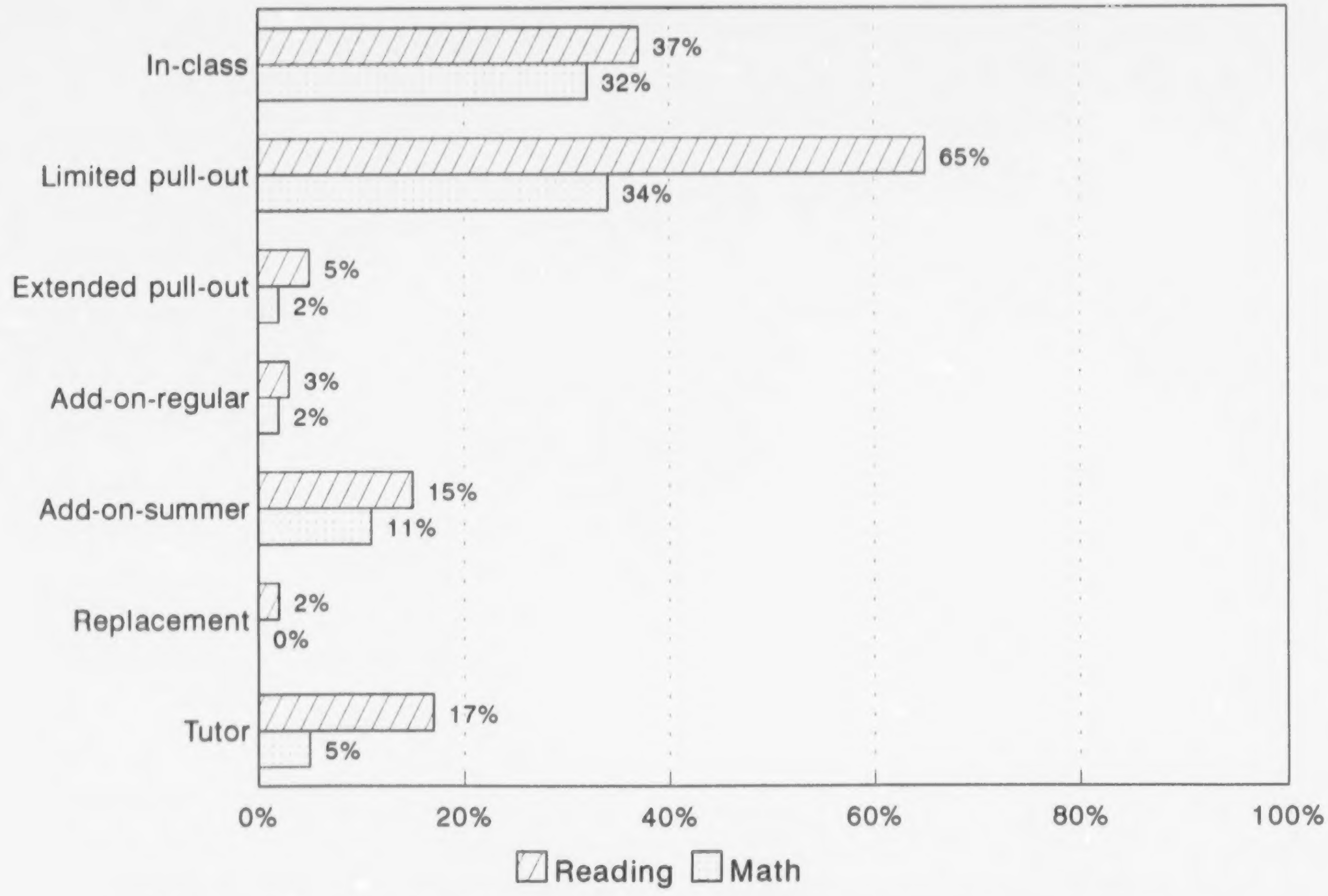

Exhibit reads: 37% of first-graders are in schools that use in-class as a Chapter 1 reading service delivery model.

Source: Prospects, Characteristics of Schools and Programs Questionnaire percentage of students that are in schools that use in-class approaches **at all**, some 65 percent of students in high-poverty schools are in schools that use in-class models in reading in comparison to 17 percent of first graders in low-poverty schools. Responses from Chapter 1 teachers and aides also indicate that students in high-poverty schools are more likely to receive Chapter 1 instruction in-class than are students in low-poverty schools.[4]

Replacement

In the replacement model, students spend a full period receiving instruction in a core subject in a course specifically designated for them. That is, the Chapter 1 instruction replaces their regular instruction in this model. The cost is typically shared between the regular and the Chapter 1 budgets. To meet this requirement for sharing cost, teaching arrangements such as team teaching or other explicit coordination strategies are used.[5]

The replacement model is more often used in middle schools and high schools than in elementary schools. Only about two percent of first grade students are in districts where the replacement service delivery model is the primary method. When the replacement model is used in elementary schools, it tends to be used in high-poverty schools.

Add-on

Add-on programs extend the typical amount of time during the school year by such strategies as before and after school programs and summer school. According to the Implementation Study (Millsap, Moss and Gamse, 1993), some fifteen percent of elementary schools have summer programs and nine percent have before and after school activities. In the *Prospects* data, as discussed in more detail in the section on instructional time, high-poverty schools are more likely than low-poverty schools to offer and to have students participate in summer school and in before/after school programs. Between ten and fifteen percent of students in high-poverty schools participate in summer school while around five percent of students in low-poverty schools do so. Similarly, teachers in high-poverty schools are more likely to tutor before or after school than are teachers in low-poverty schools. Chapter 1 teachers are not likely, however, to carry out their Chapter 1 instruction as an activity before or after school. Few Chapter 1 teachers indicated that before or after school was a frequent time for Chapter 1 instruction. Rather, instruction involving Chapter 1 teachers and aides appears to take place primarily within the normal school day.

Schoolwide

Schools that have more than seventy-five percent of their student population eligible for Chapter 1 may implement a schoolwide project model. In this model, the entire school is the target for instructional services that are funded by Chapter 1. The advantages offered by the schoolwide model include greater flexibility and increased efficiency in service delivery.

About twenty percent of all Chapter 1 schools are eligible for this model, but only about 4 percent of the schools actually use it (Millsap, Moss and Gamse, 1993). In the *Prospects* data, about five percent of first graders are in districts where schoolwide projects are the most prevalent model. This amounts to slightly more than one quarter of the first graders in high-poverty schools, i.e. in schools eligible to use this service delivery model.

Being a schoolwide project means that schools may use a variety of approaches to improve the instructional program. The *Prospects* survey asked the principal to identify the types of strategies for Chapter 1 service delivery being used in the schools. The strategies most often utilized by schoolwide projects in the *Prospects* sample include computer assisted instruction, reducing class size, and parent education programs.[6]

Additional Approaches

In addition to the five basic models that Chapter 1 schools have traditionally utilized, several other approaches to delivering Chapter 1 services are prevalent. These include tutoring, provision of preschool, and computer assisted instruction.

Tutoring

One-on-one tutoring is an extremely effective form of early intervention (Wasik and Slavin, 1994). As a strategy, tutoring covers a diverse set of practices. Tutoring may take place within or outside the regular classroom, may be undertaken by certified and highly trained teachers, by parent volunteers or by peer tutors. As a promising practice, it is important to examine the tutoring arrangements Chapter 1 schools are currently using.

According to the Chapter 1 teachers/aides, the majority of the first grade students experience at least some tutoring in reading and mathematics. About seventy percent of the first graders have some tutoring in math, and sixty-five percent receive some tutoring in reading. Exhibit 3.5 shows the percentages of first graders involved in tutoring with certified teachers, paraprofessionals, volunteers, older students, and same-age students. Tutoring involving certified teachers and paraprofessionals occurrs most frequently. High- and low-poverty schools show specific differences in who carries out tutoring. In particular, certified teachers are more likely to be tutors in low-poverty schools, while

Exhibit 3.5
Tutors utilized in Chapter 1

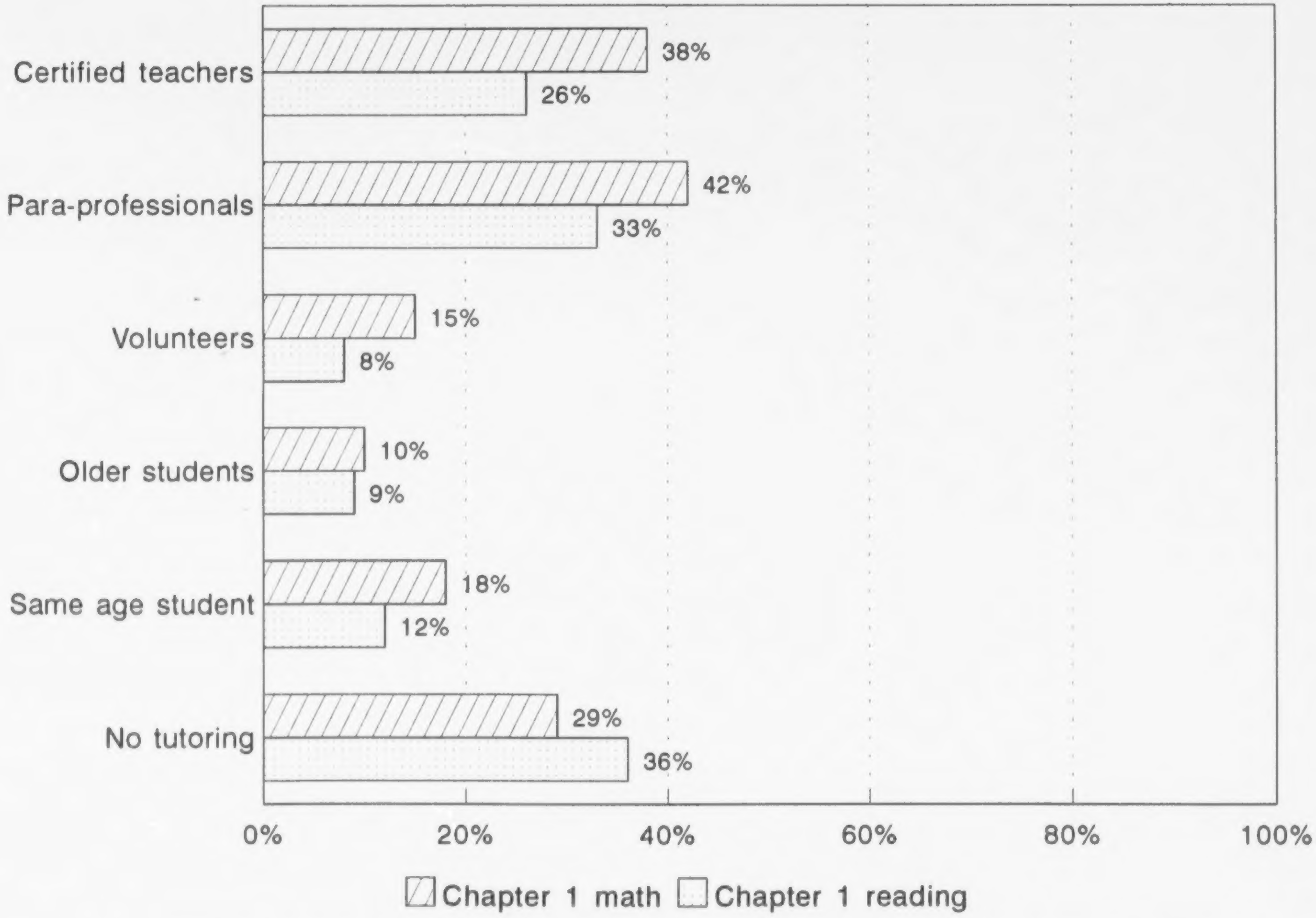

Exhibit reads: 42% first-graders are tutored by para-professionals in math.

Source: Prospects, Chapter 1 Teacher Questionnaire

paraprofessionals are more likely to be tutors in high-poverty schools. This finding is consistent with the staffing pattern differences found in low- and high-poverty schools discussed in a previous section.

Preschool

The demonstrated effectiveness of preschool participation for disadvantaged children has created a favorable environment for increasing the availability of preschool. Chapter 1 funding is not used very often for supporting preschool programs. Less than five percent of students have the district coordinators who indicate that preschool is the predominant strategy for providing Chapter 1 services. Unfortunately, little additional information about preschool as a Chapter 1 arrangement is available in the *Prospects* data.

Computer Assisted Instruction

One noticeable trend in Chapter 1 services has been the increase in resources allocated to the purchase of computer hardware and software (Pringle, Rubenstein and Janger, 1993). In the *Prospects* data we find that a high percentage of Chapter 1 math students at grade 1 (76 percent), grade 4 (70 percent) and grade 8 (84 percent) experience at least some computer use. In reading, at least 60 percent or more of the Chapter 1 students also experience some computer use.

About twenty to twenty-five percent of these students are using computers nearly everyday in reading instruction in Chapter 1. In mathematics instruction, about 45 percent of grade eight students are in Chapter 1 classes where the teacher/aide reports daily computer usage. In grade 1, seventeen percent of students are in Chapter 1 classes that utilize computers daily, as are about 31 percent of third graders. Whether these computer assisted activities are primarily used to reinforce basic skills via drill and practice or to extend higher order thinking skills is not clear. Very few Chapter 1 teachers/aides indicate that they use specific integrated software packages or strategies that focus on higher order skills, however, more detailed information about the nature of computer usage in Chapter 1 services is not available from this survey.

MULTIPLE MODELS AND SUBJECTS

Multiple Models

One area in which Chapter 1 program operation has been steadily changing over the last decade is in the provision of services in more than one subject area by more than one model (Millsap et al., 1993, Pringle et al., 1993). Looking first at the frequency of using more than one service delivery model, students in high-poverty schools are much more likely to be in schools that are using more than one approach. For example, some thirty-five percent of first graders in high-poverty schools are in schools where more than one approach is used, in comparison to seventeen percent of first graders in low-poverty schools. This suggests that high-poverty schools are expanding the nature of the Chapter 1 services within their schools, in keeping with the current legislative intent.

Multiple Subjects

One of the intentions of recent changes in Chapter 1 legislation has been to expand the number of subjects taught and to diversify the format of Chapter 1 instruction. The Implementation Study (Millsap, Moss and Gamse, 1993) documents that the number of subjects taught in Chapter 1 has expanded over the last decade. Fewer elementary schools now offer Chapter 1 in just one subject matter than was the case in 1985-86. According to the implementation study, around 70 percent of elementary schools offered Chapter 1 in two or three subjects in 1991-92.

In terms of the percentage of students who are located in districts that offer multiple Chapter 1 subjects, the *Prospects* data indicate that 48 percent of first graders and 44 percent of fourth graders are in districts that offer Chapter 1 services in both reading and math. The corresponding percentage for eighth graders is substantially lower, with only 18 percent of eighth graders in districts that offer Chapter 1 in both math and reading. These percentages are consistently related to poverty concentration of the schools, with students in high-poverty schools much more likely to be in districts that offer Chapter 1 services in multiple subjects. It is thus clear that, consistent with the findings of the Implementation Study, a substantial percentage of first- and fourth-grade children are in districts that offer Chapter 1 services in multiple subjects, and students in high-poverty schools are most likely to be in such districts.

Looking now at the percentage of students who participate in Chapter 1, Exhibit 3.6 shows the participation rates for grade 1 for reading, mathematics, both reading and mathematics, reading only and mathematics only.

Participation in Chapter 1 reading instruction remains the single largest participation category. Almost all first graders who participate in Chapter 1 do so in reading (96 percent). Sixty-six percent of first grade Chapter 1 students participate only in Chapter 1 reading, 4 percent participate only in Chapter 1 math, and 30 percent participate in both reading and math.

Looking at the variations in participation patterns by school poverty indicates that first graders in high-poverty schools are more likely to participate in both reading and mathematics than are students in low-poverty schools. About 39 percent of the students in high-poverty schools participate in both, while the corresponding figure for the low-poverty schools is 29 percent. A similar pattern occurs with students in the fourth and eighth grades, where students in high-poverty schools are more likely to

Exhibit 3.6

Chapter 1 participation patterns by subject matter

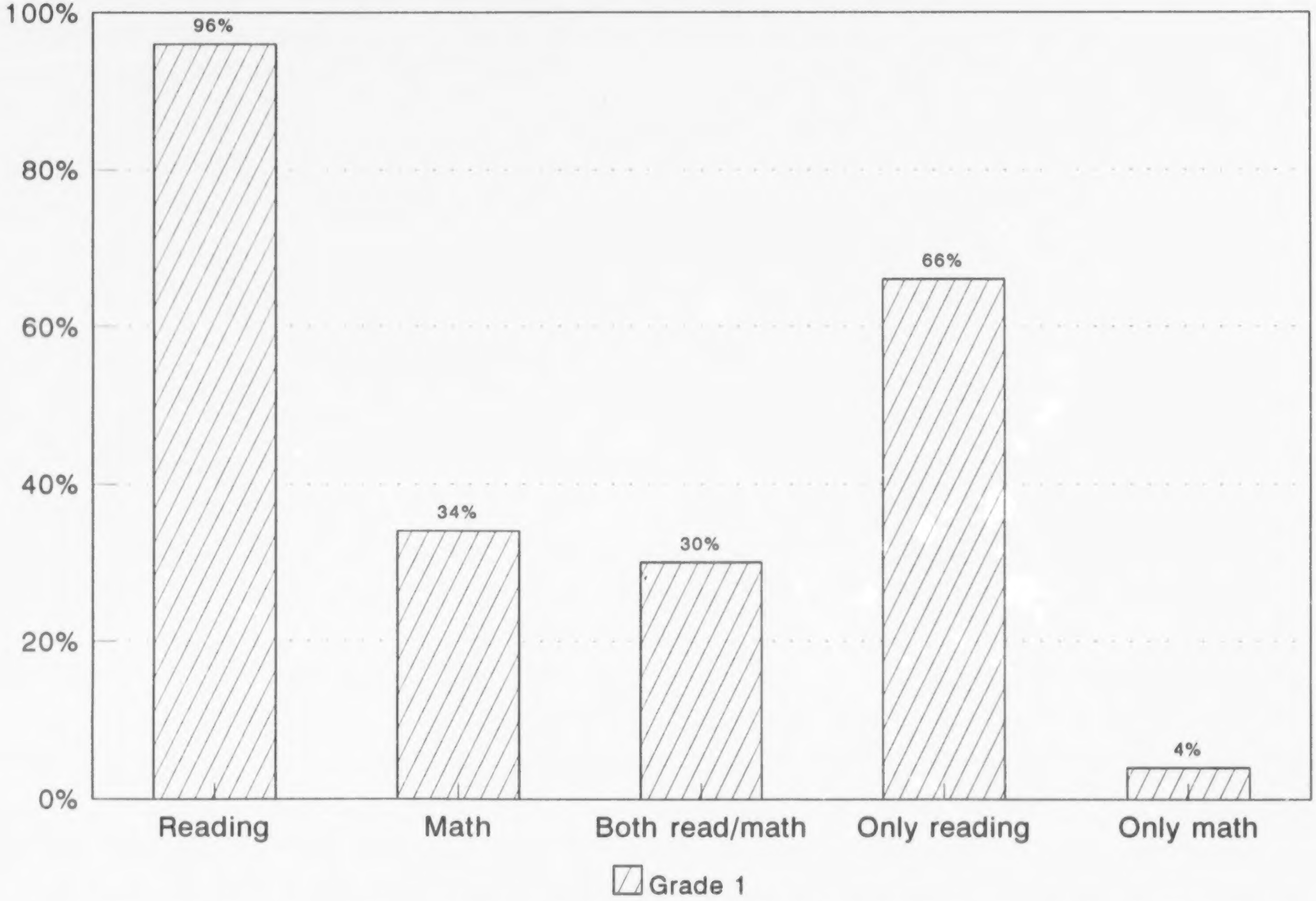

Exhibit reads: 96% of first-grade Chapter 1 students participate in Chapter 1 reading.
Source: Prospects, Composite Participation Variable

participate in both reading and math than are students in low-poverty schools. These analyses exclude the schoolwide programs in the calculations for the high-poverty group.[7]

Only a small percentage of students at any grade participate in Chapter 1 in non-instructional areas. Across cohorts, only about 7 percent of Chapter 1 students participated in non-instructional Chapter 1 services. Such participation was highly related to poverty concentration of the schools. With regard to Chapter 1 students, about 8 percent of such students in low-poverty schools participated in non-instructional services, while about 25 percent of Chapter 1 students in high-poverty schools did so.

In summary, about thirty percent of the students in elementary schools participate in both reading and mathematics instruction in Chapter 1, indicating that for an appreciable number of students Chapter 1 is no longer simply a supplemental reading program. Students in high-poverty schools are more likely to participate in multiple subjects than are students in low-poverty schools. Expansion of Chapter 1 into the area of non-instructional services remains very modest, with less than 5 percent of students participating. Students in high-poverty schools are more likely to participate in these support services than are students in low-poverty schools.

SERVICE DELIVERY MODELS AND CLASSROOM ORGANIZATION

Variation Within Model

This section describes the staffing, materials, grouping practices, and time-use patterns in Chapter 1 instruction. Specific attention is paid to contrasts between low- and high-poverty schools, and between in-class and pull-out service delivery models. Of particular interest here are comparisons of models across poverty levels. For example, a description of the operation of in-class models in low- and high-poverty schools is presented.

Staffing

The number and quality of staff involved in the delivery of Chapter 1 services are no doubt critical factors in the effectiveness of the services. Considering the possible combinations of teachers and aides (aide only, teacher only, teacher and aide, teacher and multiple, multiple teachers), the most prevalent pattern for Chapter 1 instruction in math and reading is a teacher without an aide. Reports from the principal of the major staffing arrangements used for Chapter 1 provide a more detailed staffing picture (see Exhibit 3.7).

High-poverty schools have a substantial proportion of Chapter 1 classes that are taught only by an aide (22 percent in math and about 1 percent in English). In general, the classes in high-poverty schools are staffed with roughly a comparable number of persons as are low-poverty schools. However,

Exhibit 3.7
Chapter 1 staffing in reading in low and high poverty schools

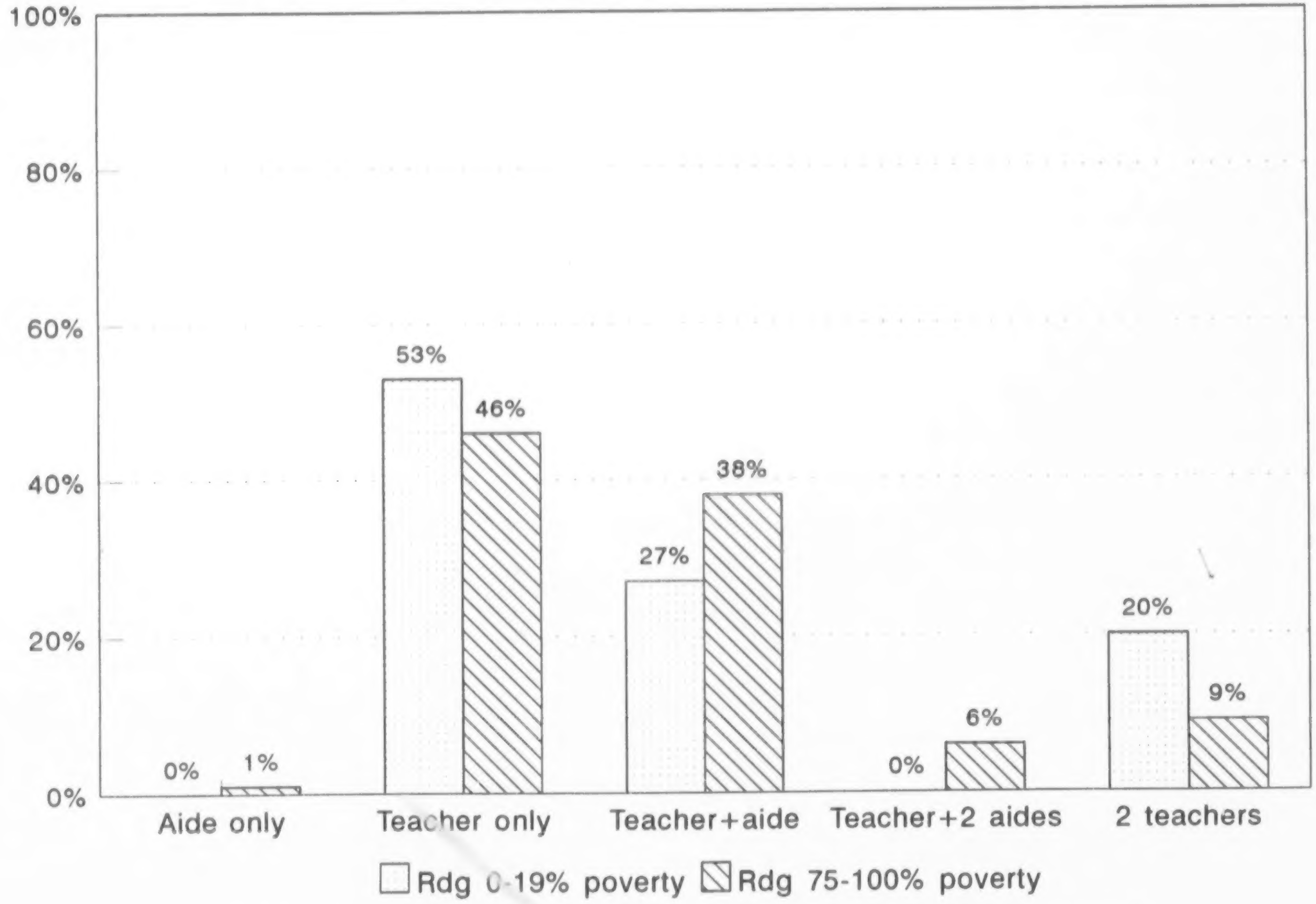

Exhibit reads: 53% of first-graders in low-povery schools recorded instruction in reading by a teacher without an aide.

Source: Prospects, Principal Questionnaire the high-poverty schools employ a greater proportion of aides, while the low-poverty schools employ more teachers. For example, about 9 percent of first graders in high-poverty schools are taught by two teachers, and about 20 percent of first graders in low-poverty schools benefit from instruction by two teachers.

Another important difference between low- and high-poverty schools is the extent to which aides are involved in instruction or assistance with limited-English-proficient students. About one quarter of the aides in high-poverty schools report assisting students with limited English proficiency as an activity. Virtually none of the aides in the low-poverty schools so report.

Classroom aides, then, may have many and varied classroom responsibilities that are not limited to collecting lunch money, recording attendance and other managerial functions. The preparedness of aides for instructional tasks is therefore of some importance. However, there is only limited data on this topic. In terms of staff development activities, approximately 70 percent of the classroom aides in first grade reading participated in some inservice training during the academic year. However, the focus, intensity, and quality of this training is not known.

In terms of other qualifications of the aides, slightly more than half the aides have earned a high school diploma. Only a small proportion of the aides (about 1 percent) did not graduate from high school. Finally, about thirty-five percent graduated from high school and attended some postsecondary education. The remainder obtained a college or other degree.

Chapter 1 Instructional Time

Chapter 1 instructional time is defined here as the product of the number of days per week and minutes per day scheduled and used for academic instruction, as reported by the Chapter 1 teachers. Although the composite variable, total academic instructional time, is the primary variable of interest, this section also discusses scheduling practices and time utilization factors that make up this composite measure.

Days Per Week

About sixty to seventy percent of first graders receive Chapter 1 services five days per week. Students are more likely to receive services in reading five days a week (69 percent) than they are in math (62 percent). A greater percentage of students in high-poverty schools receive services each school day than students in low-poverty schools (80 percent vs 47 percent in reading and 95 percent vs 15 percent in math). Finally, in high-poverty schools, whether the services are delivered in a pull-out or in-class format is related to scheduling practices. About 80 percent of the students in-class are scheduled daily, while about 90 percent of students in pull-out programs are so scheduled.

Time Scheduled

The amount of time scheduled and the days per week scheduled define the maximum amount of Chapter 1 instructional time that a student will receive. On average, the amount of time scheduled for Chapter 1 reading and math instruction is very similar, 29 and 26 minutes per day respectively. Students in high-poverty schools appear to have appreciably more time scheduled for Chapter 1 instruction in both reading and math than do students in low-poverty schools. In reading instruction, the students in high-poverty schools have 35 minutes per day of Chapter 1 instruction scheduled in comparison to 21 minutes per day scheduled for students in low-poverty schools. The corresponding figures in math are 30 and 17 minutes. There are no differences between in-class and pull-out models in the amount of time scheduled in reading; however in math, students in pull-out classes are scheduled for about 10 fewer minutes per day than are students in in-class (22 vs 32 minutes).

Time used

Not all the time scheduled for Chapter 1 instruction is actually used for instruction. Classroom time is taken up with academic and non-academic tasks. Exhibit 3.8 contrasts the amount of time used in low- and high-poverty schools, in in-class and pull-out models, and in reading and math instruction. Overall, students in high-poverty schools have more academic time scheduled and used than do students in low-poverty schools, and this is true for both reading and math. In mathematics, the high-poverty and low-poverty students receive 23 and 15 minutes per day, respectively, while in reading the comparison is 28 and 13 minutes per day.

Students in high-poverty schools utilizing an in-class service delivery model appear to have more Chapter 1 instructional time than do high-poverty students in pull-out programs or low-poverty students in pull-out or in-class programs. For example, in both reading and math, the students in the in-class arrangements received on average about 5 minutes more of Chapter 1 instruction per day than did students in the pull-out format. These differences arise both from scheduling and time use differences. Although five minutes may seem inconsequential, it is important to recall that these are actual instructional minutes, not simply scheduled time. Over the course of a year, the use of in-class model would result in about 900 additional minutes, or 15 hours of additional Chapter 1 time.

Timing of Chapter 1 Services

When Chapter 1 services take place during the instructional day depends upon the type of service delivery model in use. Students who receive Chapter 1 services in-class are much more likely to receive the services during the regular subject's instructional time (i.e. Chapter 1 math during regular math time) than are students who are pulled-out. In pull-out instruction, children receive services during homeroom,

Exhibit 3.8

Daily minutes of Chapter 1 instruction by poverty, subject and delivery model

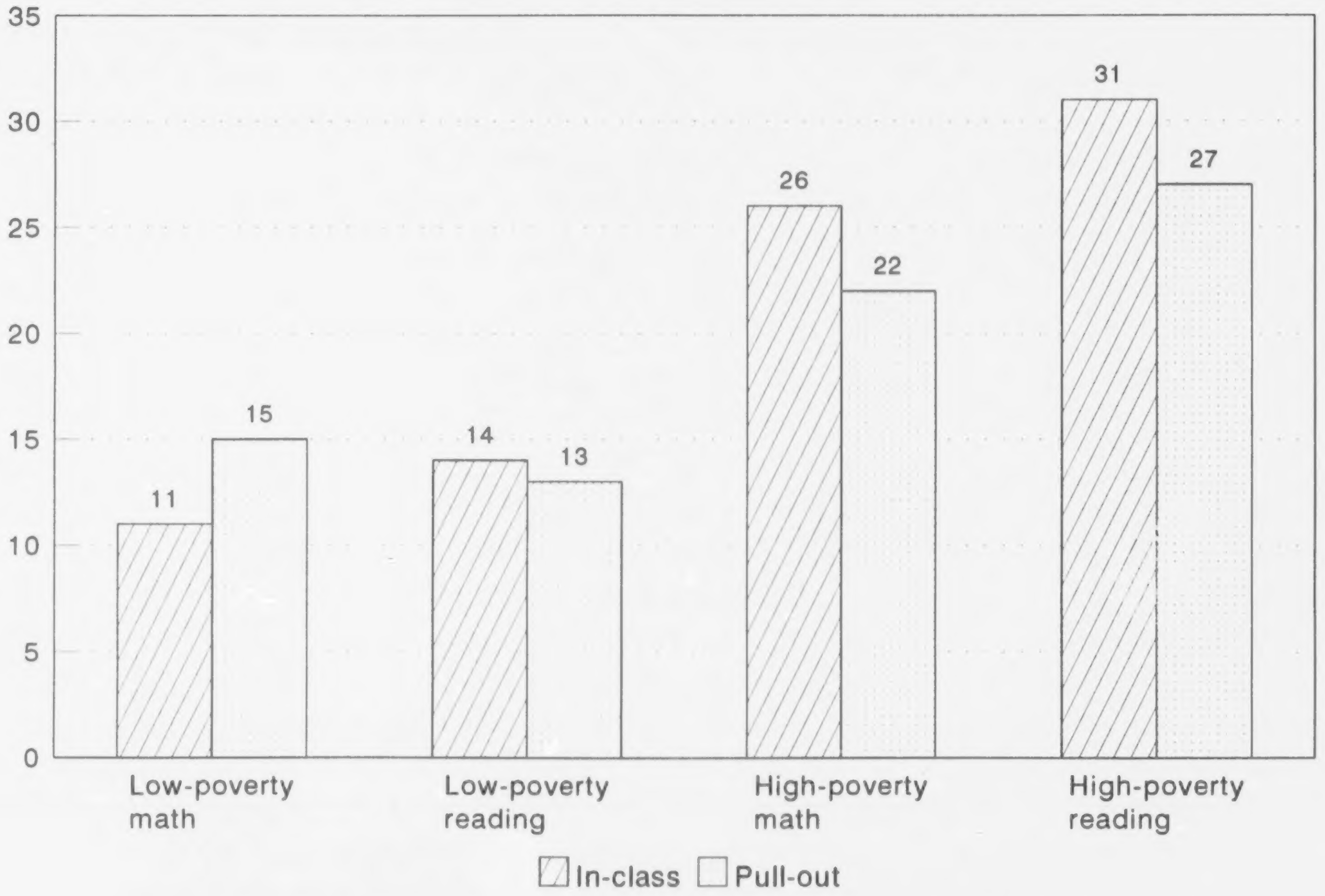

Exhibit reads: Students in low-poverty schools who receive Chapter 1 math services receive 11 minutes instructional time per day.

Source: Prospects, Chapter 1 Teacher Questionnaire

math, reading, art, and social studies to about the same degree. For example, of those who are pulled out for math instruction, about 32 percent are pulled out during math instruction and about 20 percent during reading instruction.

In in-class models, the Chapter 1 services are more likely to be concentrated and delivered during the regular reading and mathematics time, and not during art or social studies or homeroom. For example, 80 percent of first grade students are in classes in which Chapter 1 mathematics takes place during mathematics instruction; 12 percent of first graders are in in-class programs where Chapter 1 math takes place during social studies. In pull-out, on the other hand, about 32 percent receive math instruction during social studies — about the same percent of students who are pulled out during math. Pull-out services are spread through out the day; in-class services are more concentrated during reading and math instruction. Exhibit 3.9 shows the percent of students in in-class and pull-out models who receive Chapter 1 reading services during specific parts of the day.

From the perspective of maintaining classroom routine, the concentration of services in the in-class model during reading and math time may offer specific advantages. However, it may be that Chapter 1 students in in-class models actually miss more of the regular instruction in these core subjects than do students in pull-out instruction. An important issue is whether Chapter 1 teachers primarily reinforce the teaching of the regular teacher or present new material. Examining the extent to which Chapter 1 teachers present new material or reinforce existing skills, virtually all (93 percent) first grade Chapter 1 math instruction is aimed at reinforcing already presented material. The percentage of Chapter 1 math teachers who reinforce instruction does not change by the poverty level of the school or the service delivery model used.

In Chapter 1 reading instruction, about 80 percent of the Chapter 1 reading teachers use Chapter 1 time to reinforce instruction. Of the teachers using the pull-out model, about 95 percent report that they reinforce basic skills previously presented. Of the teachers using the in-class model, about 85 percent report the use of Chapter 1 to reinforce skills while 15 percent report teaching new material.

MATERIALS

One of the most striking findings in the *Prospects* Interim Report (Puma, Jones, Fernandez and Rock, 1993) is the contrast in the types of materials used by teachers in low- and high-poverty schools. In that report, it was found that teachers in high-poverty schools were much more likely to use basal series and textbooks, while teachers in low-poverty schools relied upon tradebooks, manipulatives and

Exhibit 3.9

When Chapter 1 reading instruction occurs in in-class and pull-out models

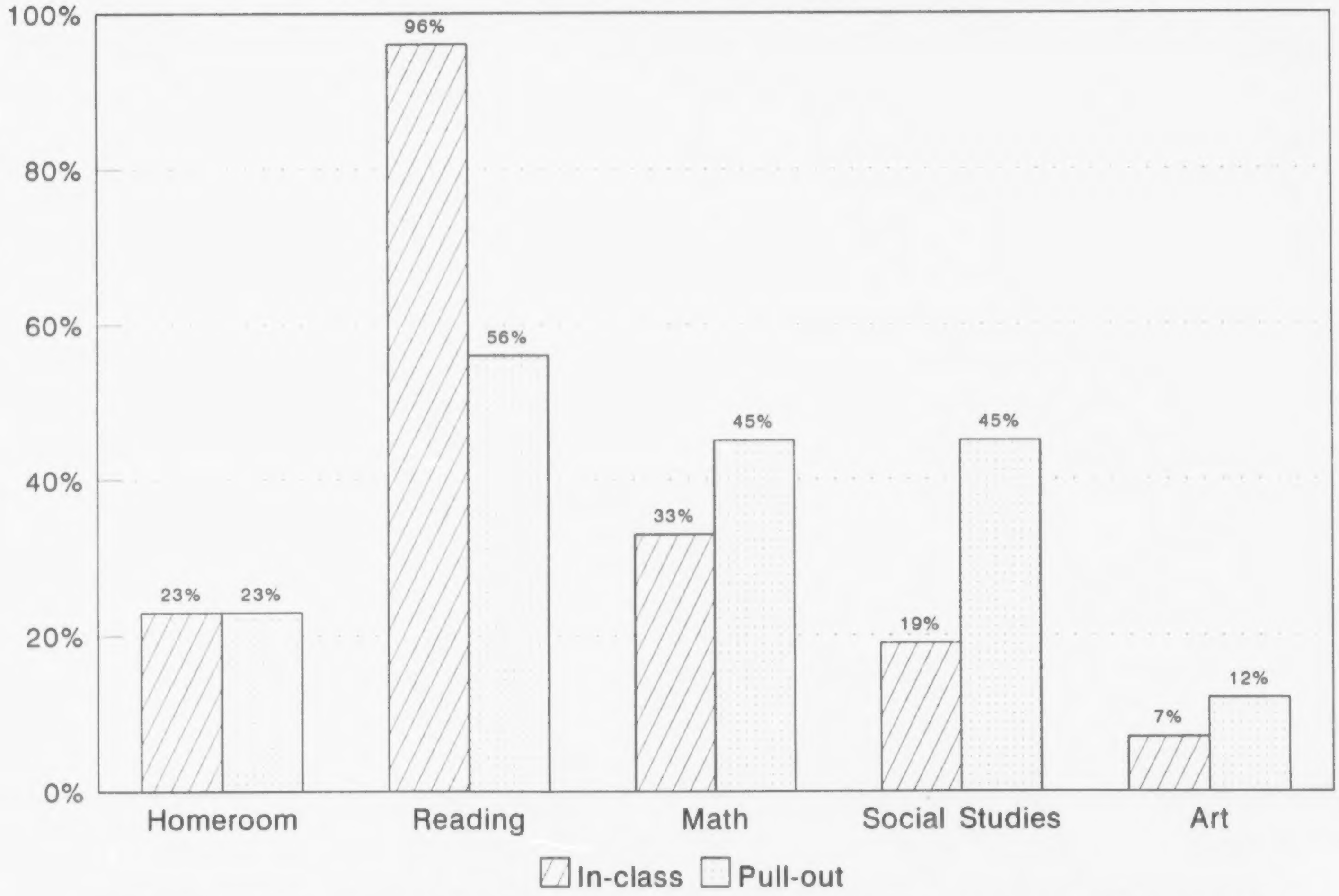

Exhibit reads: 96% of first-graders who receive Chapter 1 reading instruction via in-class participate during their regular reading instruction.

Source: Prospects, Chapter 1 Teacher Questionnaire

teacher developed materials. These differences in materials used are important indicators of the quality and nature of the curriculum.

In instruction in Chapter 1 classes, as Exhibit 3.10 shows, there are also striking differences in the types of materials used. The low-poverty schools are far more likely to use basal readers and instructional kits, and are much less likely to use language experience stories and controlled vocabulary materials. These patterns in Chapter 1 classrooms are similar to those found in the description of materials used by regular teachers in low- and high-poverty schools.

The Chapter 1 teacher and the regular teacher are in fact likely to use the same materials. At the elementary grades, the Chapter 1 teachers and the regular teachers report that they utilize the same materials roughly 40 percent of the time. This frequency is reduced somewhat in the eighth grade, primarily because there is a greater incidence of the Chapter 1 teacher being the only subject teacher (e.g. replacement model or extensive pull-out programs are used, see Exhibits 3.11 and 3.12).

Chapter 1 teachers/aides in high-poverty schools are much more likely to report that the materials are in short supply than are teachers/aides in low-poverty schools. Lack of basic resources for teaching is clearly more of a problem in high-poverty schools than low-poverty schools. Chapter 1 helps close that gap, but certainly both the Chapter 1 and regular teachers see a lack of resources as a continuing problem.

STUDENTS TAUGHT

Chapter 1 teachers in low- and high-poverty schools differ in the number of students they teach each day and the number of those students who are Chapter 1 participants. Teachers in the low-poverty schools actually teach far more students in a given day (27 vs 19), but far fewer of these are Chapter 1 students (4 vs 11). While a teacher in a low-poverty school has about 15 percent of her students as Chapter 1 participants, a teacher in a high-poverty school has roughly 60 percent.

GROUPING

In Chapter 1 math instruction, the predominant form of classroom organization is whole class instruction. In the first grade Chapter 1 math classes, about 48 percent are whole-group, 30 percent are individualized, and 22 percent utilize two or more groups. For first grade math, there are differences in the grouping patterns used in different service delivery models. In-class instruction was associated with more individualized instruction, and pull-out models with more whole-group instruction. When teachers group students in math, they tend to group them by similar ability.

Exhibit 3.10

Percentage of students whose Chapter 1 reading teachers report frequent use of indicated instructional materials by poverty concentration of the school

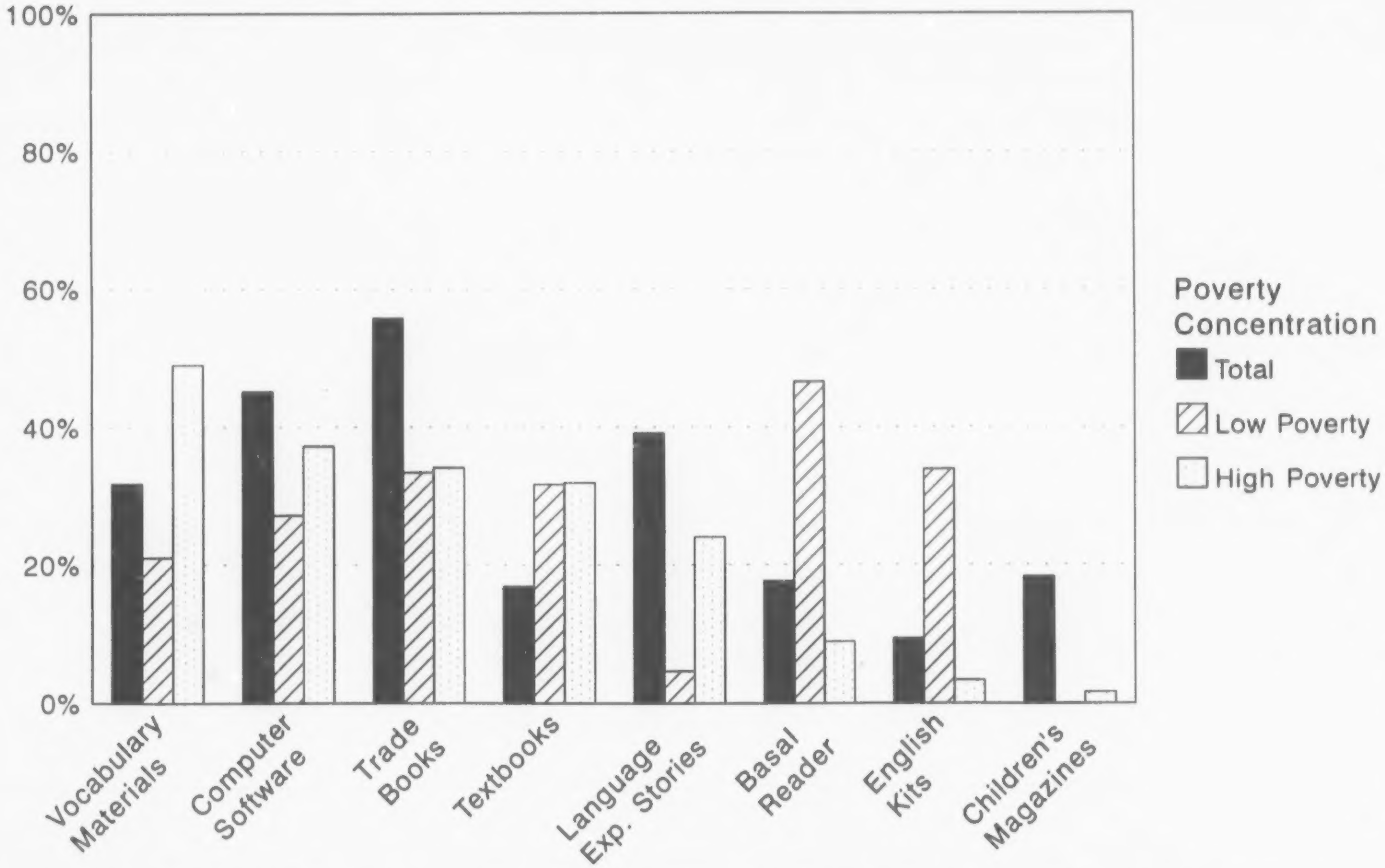

Exhibit reads: 21% of first-graders in low-poverty schools have Chapter 1 reading teachers who report frequent use of controlled vocabulary materials.

Source: Prospects, Chapter 1 Teacher Questionnaire

EXHIBIT 3.11
PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 MATHEMATICS TEACHERS REPORT USING DIFFERENT MATERIALS AND SAME MATERIALS BY COHORT AND POVERTY CATEGORY[1]

CHAPTER 1 TEACHER CHAPTER 1 COMPARED TO REGULAR MATHEMATICS MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Only Class	18.98	0	6.46	31.96	31.76	18.10
Same Materials & Levels	39.14	63.13	47.41	44.04	21.31	24.77
Different Levels	10.13	0	20.93	0	7.87	11.49
Different Materials	26.78	0	15.67	24.00	39.06	45.64
Different Materials & Levels	4.97	36.87	9.54	0	0	0
% Missing	97.00	99.26	95.69	95.47	97.07	96.16
Valid N	478	38	59	66	152	160
Valid WTD N	106745	6222	31535	20009	26813	18329
3RD GRADE COHORT						
Only Class	16.01	0	4.03	1.69	29.88	32.00
Same Materials & Levels	36.94	16.50	57.71	28.36	26.95	21.53
Different Levels	11.81	0	11.30	16.64	23.99	8.55
Different Materials	25.20	64.92	4.18	37.84	18.19	35.92
Different Materials & Levels	10.05	18.58	22.78	15.46	1.00	2.00
% Missing	95.99	99.19	94.36	95.87	96.23	90.38
Valid N	652	29	86	85	115	330
Valid WTD N	122148	7836	30496	18798	18991	38545
7TH GRADE COHORT						
Only Class	47.49	20.20	20.09	43.68	88.08	40.53
Same Materials & Levels	26.35	0	60.10	33.98	0	21.89
Different Levels	6.04	0	0	11.24	0	0
Different Materials	7.42	29.69	0	9.51	0	0.39
Different Materials & Levels	12.69	50.11	19.81	1.59	11.92	37.19
% Missing	97.05	99.15	98.96	93.12	96.06	95.61
Valid N	280	14	21	116	58	70
Valid WTD N	86741	6628	8358	46629	15923	9111
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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[1] Source: Chapter 1 Teacher Questionnaire

EXHIBIT 3.12

PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 ENGLISH/READING TEACHERS REPORT USING DIFFERENT MATERIALS AND SAME MATERIALS BY COHORT AND POVERTY CATEGORY[1]

CHAPTER 1 TEACHER CHAPTER 1 COMPARED TO REGULAR ENGLISH/READING MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Only Class	2.24	0	0	19.94	0	2.11
Same Materials & Levels	25.91	0	33.82	32.65	25.66	19.23
Different Levels	4.97	31.69	10.41	0	3.45	1.43
Different Materials	33.69	68.31	23.79	15.63	26.25	53.92
Different Materials & Levels	33.19	0	31.98	31.78	44.65	23.31
% Missing	89.39	97.91	92.01	92.74	82.06	79.40
Valid N	1397	60	156	114	493	569
Valid WTD N	377244	17628	58506	32070	164388	98259
3RD GRADE COHORT						
Only Class	4.93	0	0	0	12.29	9.01
Same Materials & Levels	25.06	22.64	35.07	41.18	13.07	10.97
Different Levels	13.14	0	1.24	3.64	39.05	17.88
Different Materials	29.78	43.34	10.38	26.82	17.57	45.31
Different Materials & Levels	27.09	34.02	53.31	28.35	18.03	16.83
% Missing	92.23	96.47	92.65	91.08	91.93	81.54
Valid N	1116	57	135	148	239	530
Valid WTD N	236507	34107	39753	40557	40654	73955
7TH GRADE COHORT						
Only Class	32.76	11.36	35.09	8.14	53.67	58.04
Same Materials & Levels	11.41	53.86	0	0	0	12.75
Different Levels	6.65	4.04	0	22.78	0	0
Different Materials	18.09	7.24	36.28	10.04	26.41	14.23
Different Materials & Levels	31.08	23.50	28.63	59.05	19.91	14.98
% Missing	96.17	97.51	98.16	95.65	92.52	91.04
Valid N	400	45	42	122	95	95
Valid WTD N	112681	19486	14881	29446	30210	18568
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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[1] Source: Chapter 1 Teacher Questionnaire

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Chapter 1 first grade reading instruction follows a somewhat different pattern, with the dominant pattern being grouping into two, three, or four or more groups. These within-class groupings account for some 43 percent of the cases. Whole class instruction occurs in 40 percent of the cases. Low-poverty schools are slightly more likely to use individualized instruction than are high-poverty schools. In reading, Chapter 1 teachers group students to about the same degree on the basis of similar ability and on the basis of diversity. The grouping strategies used in reading classes appear to be more varied than those used in math instruction.

ENDNOTES

1. The District Questionnaire included preschool as a service delivery model.

2. There are insufficient responses to permit detailed analyses of these items for the low poverty schools.

3. As the *Prospects* data analysis continues, it will be possible to examine not only trends in the service delivery model utilization, but where changes are taking place.

4. The estimates from the district, school, and teacher data will necessarily differ as the questions differ across the three samples. The district coordinator was asked to indicate the most predominant approach (a single answer), while the principal and teachers indicated all approaches that were used. Finally, the list of service delivery options was not the same across the three surveys.

5. This discussion was drawn from the presentation on replacement programs in the report by Pringle, Rubenstein and Janger (1993).

6. Twenty six schools in the *Prospects* 1992 data are schoolwide projects. Because of the small sample size and unknown representativeness of these schools, additional analyses of their characteristics are not undertaken.

7. The rates provided by the Implementation Study and the present discussion provide estimates of school provision and student participation. The rates are measures of different, although related phenomena. The school must offer both reading and math in order for students to participate in both, but beyond this relationship at the extreme, there is no certain relationship between provision and participation.

CHAPTER IV

THE OTHER FIVE AND ONE HALF HOURS: CURRICULUM AND INSTRUCTION IN REGULAR CLASSROOMS

IV. THE OTHER FIVE AND ONE-HALF HOURS: CURRICULUM AND INSTRUCTION IN REGULAR CLASSROOMS

OVERVIEW

Important as Chapter 1 is, Chapter 1 services comprise only a fraction of the school day. Chapter 1 is a supplemental program for the majority of students who participate in it. This section of the report focuses on the other five and one-half hours of the school day — the regular instructional program. The purpose of this section is to characterize the curriculum and instruction in low- and high-poverty schools in the regular classroom. Of particular interest is the extent to which high- and low-poverty schools provide similar learning experiences for children. The major conclusions are:

- High-poverty schools rely upon a traditional approach to reading instruction to a greater degree than low-poverty schools. This approach emphasizes reading readiness and decoding, utilizing three instructional groups, and basing instruction on textbooks and basal series.

- Whole class instruction is the dominant practice. First grade reading instruction is the only situation in which appreciable grouping is used.

- When grouping is utilized, the basis for grouping is most often similar abilities.

- Students' regular math and reading classes contain about 22 students, with little variation by school poverty.

- Tutoring is most often carried out as peer tutoring, followed by tutoring using a certified teacher. The use of paraprofessionals to tutor is frequent in high-poverty schools.

- For both reading and math instruction, teachers of students in high-poverty schools are the most likely to report that computers are never used in their regular classrooms. However, most students, even in high-poverty schools, are in classrooms where computers are used at least some of the time.

CURRICULAR CONTENT AND APPROACH

Schooling for disadvantaged children has often been criticized as falling far short of providing the quality education needed to prepare students for more schooling and the work world. Recently, the chief indictment levied against schooling for disadvantaged children centered on the curricular focus and methods of instruction. In particular, instruction for disadvantaged youngsters often stresses basic skills, such as knowing facts and details, and not such higher order competencies as the ability to synthesize data and appropriately apply concepts. While more advantaged youngsters are problem solving, disadvantaged students vare often memorizing facts or working on low-level, disconnected instructional trivia. Current theories of learning and instruction emphasize the concurrent development of advanced and basic skills.

To what extent do students in low- and high-poverty schools have access to and participate in the same type of curriculum? Is the curriculum in high-poverty schools enriched by the inclusion of advanced skills as well as basic?

Because learning to read is so fundamentally linked to school success in the first grade and beyond, we focus primarily on curricular content and approaches in reading. Exhibit 4.1 shows the emphasis that first grade reading teachers give to particular objectives. The greatest agreement among teachers is the emphasis accorded the development of appropriate attitudes toward reading and developing dispositions necessary to be a reader. In the first grade, over 90 percent of the teachers indicate they emphasize these objectives. Important differences in high- and low-poverty schools in the orientation toward basic skills and higher order skills are highlighted in Exhibit 4.2. High-poverty schools are more likely to emphasize reading readiness skills, decoding (word analysis skills), learning word meaning, and spelling skills than are low-poverty schools. At the same time, high-poverty schools are less likely to emphasize writing in the first grade than are high-poverty schools. Integrating writing with reading indicates an approach to literacy that emphasizes children's thinking as well as skill development. That high-poverty schools do not emphasize writing, combined with their pattern of emphasizing skill acquisition, casts at least some doubt on how far high-poverty schools have moved from skill and drill instruction.

This look at what first grade teachers emphasize certainly does not suggest that high-poverty schools have abandoned their emphasis on basic skills or necessarily integrated higher order skills into their teaching. Given this result, it is of note that teachers in both low- and high-poverty schools indicate to about the same extent that they utilize whole language approaches to language arts instruction. Looking at the activities underneath the label suggests, however, that the actual curriculum may still be quite different in low- and high-poverty schools. The fact that high-poverty schools also continue to emphasize mastery learning and individualized instruction to a greater degree than low-poverty schools additionally suggests a continuation of a skill mastery approach (see backup Exhibit 4A.3 in the appendix). In addition, teachers in high-poverty schools are much more likely to rely upon textbooks and basal series while the low-poverty schools utilize tradebooks and other literature (see Exhibits 4A.13 and 4A.14 in the appendix). The materials used, coupled with the objectives emphasized, and the grouping

EXHIBIT 4.1
PERCENTAGE OF STUDENTS WHOSE 1ST GRADE READING/ENGLISH/LANGUAGE ARTS TEACHERS WHO REPORT THAT THEY EMPHASIZE A PARTICULAR APPROACH OR CONTENT AREA BY POVERTY CONCENTRATION OF THE SCHOOL[1]

TEXT MATERIALS EMPHASIS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
Developing Reading Readiness Skills	71.34	67.93	67.44	73.19	77.46	79.89
Developing Listening Skills	80.47	71.88	74.47	88.87	84.53	85.43
Learning Word Analysis Skills	73.98	67.35	78.12	77.54	69.50	79.27
Learning Vocabulary/Word Meanings	72.30	63.55	63.72	83.85	74.98	80.11
Learning Manuscript Writing	50.19	47.06	43.50	54.47	51.09	60.31
Learning Cursive Writing	10.99	0.69	5.06	28.22	2.34	12.50
Learning Spelling Skills	44.51	34.44	51.28	41.89	47.14	42.88
Learning Writing and Composition Skills	59.20	70.56	50.52	57.15	52.83	58.49
Learning Grammar	39.55	32.62	44.72	41.41	36.12	41.96
Learning to Follow Directions	84.95	82.87	76.68	94.19	86.79	93.34
Learning to Comprehend Facts/Details	73.61	64.90	76.42	89.03	75.41	75.68
Learning to Identify the Main Idea	61.92	56.39	61.30	74.76	63.43	71.50
Remember Sequence of Significant Events	72.52	70.46	70.91	76.95	78.25	79.56
Differentiate Fact From Opinion	36.24	28.38	35.47	44.29	39.36	46.39
Learning to Draw Inferences	44.91	36.07	42.25	49.31	51.68	58.42
Learning to Read Charts and Graphs	41.29	45.20	27.48	47.65	48.13	45.24
Learning Note-Taking, Study Skills	8.37	22.47	3.28	8.32	0.55	13.35
Learning to Use Life Skills Materials	8.16	19.67	1.23	8.74	3.74	10.16
Criteria to Evaluate Reading Materials	11.49	19.77	2.85	17.55	3.28	16.52
Developing Oral Communication	62.97	61.19	59.72	60.49	69.70	60.87
Developing an Appreciation For Reading	96.86	97.94	97.42	95.32	96.18	96.10
Developing an Appreciation For Writing	84.25	97.49	66.00	82.58	84.99	86.59
Develop Student Confidence-Reading Ability	97.94	98.54	98.06	96.20	98.64	96.39
Develop Student Confidence-Writing Ability	87.81	98.09	74.46	87.16	88.58	87.01
Improve Understanding of Value of Reading	91.67	95.78	87.44	91.01	91.86	89.27
% Missing	3.74	0.81	2.58	1.76	6.99	3.64
Valid N	8523	1384	1413	1199	2051	2411
Valid WTD N	2834522	676759	603114	370449	762628	338465

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[1] Source: *Prospects*, Teacher Questionnaire. The valid N for each item varies as a result of a "not applicable" response category. The valid N reported here is the minimum across the response categories.

Exhibit 4.2

Curricular emphasis first-grade reading

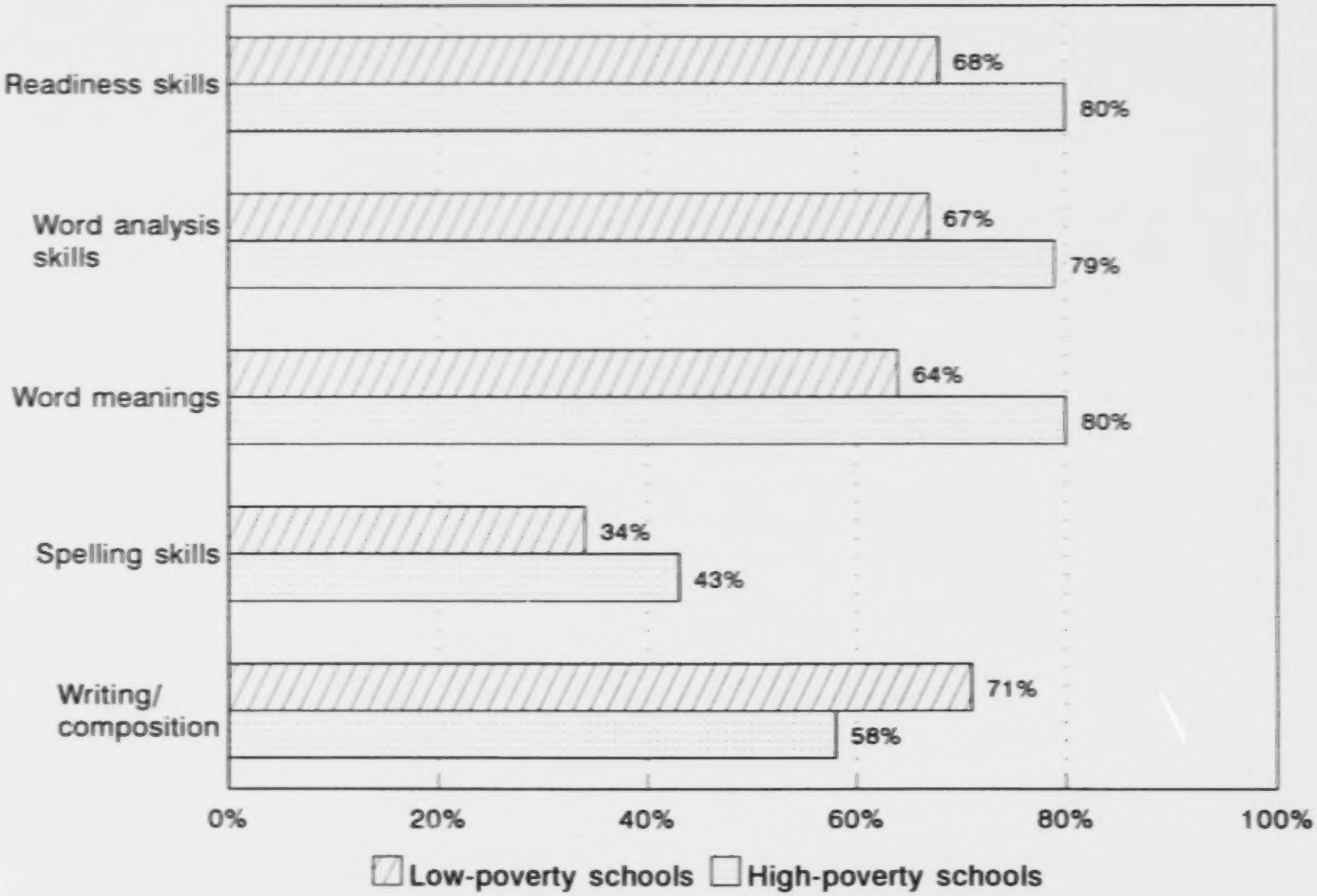

Exhibit reads: 68% of students in low-poverty schools are in reading classes that emphasize reading readiness skills.

Source: Prospects, Regular Teacher Questionniare practices utilized suggest that high-poverty schools may still be providing a curriculum that primarily emphasizes basic skills. More systematic data on curricular content and practices is needed to better inform this issue.

GROUPING PRACTICES

Whole class instruction is the most frequently utilized grouping strategy in math, with over 70 percent of the students not grouped. Whole class instruction, in both reading and math, is more likely to be used by low-poverty in comparison to high-poverty schools. When grouping is used, the dominant pattern is two groups for math (8 percent) and three groups for reading (29 percent). Students in high-poverty schools are in schools that use three groups in reading instruction to a greater extent than whole class instruction (33 vs 21 percent). This prevalence of three reading groups in high-poverty schools suggests that these schools still rely on a traditional approach to reading instruction. Exhibit 4.3 contrasts the grouping practices experienced by students in low- and high-poverty schools.

When students are grouped, the most frequently cited basis for grouping is similarity of abilities in both reading and math.

CLASS SIZE

Teachers report the number of students in their math and reading classes. On average, first-graders' math classes contain about 22 students, and reading classes contain about 21 students. There is little variation in class size by poverty level of the school.

TUTORING

Tutoring is an important educational strategy that has been found to be especially effective for primary school-aged students. The most effective tutoring strategies are structured approaches (Wasik and Slavin, 1993). A high proportion of the teachers indicate that tutoring of some form takes place for both math and reading. The data indicate who served as tutor, but provides no information about the content, duration, and frequency of the tutoring sessions. Consequently, the label "tutoring" includes such a diverse set of practices that additional detailed analyses are not warranted. The appendix presents data on the frequency of tutoring by specific staff and personnel (see Exhibits 4A.11 and 4A.12). The reliance of high-poverty schools on paraprofessionals to carry out tutoring is noted.

Exhibit 4.3
Grouping practices in first-grade reading by school poverty

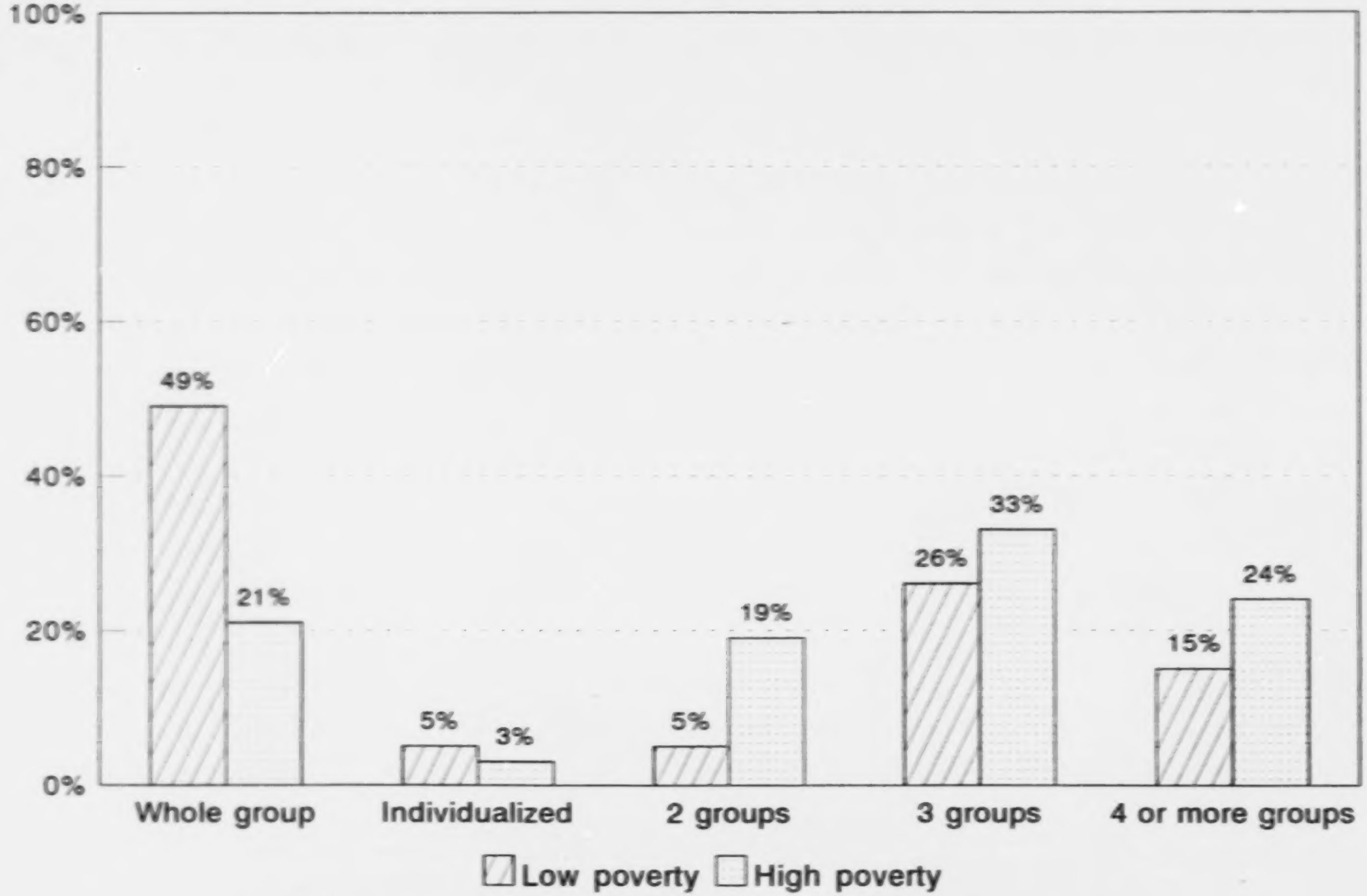

Exhibit reads: 49% of first-graders in low-poverty schools receive instruction in whole class format.

Source: Prospects, Regular Teacher Questionniare

COMPUTER USAGE

Although computer usage in classrooms is often considered a common practice, there remains a sizeable proportion of students, particularly in the eighth grade, whose teachers never utilize computers. This information is derived from a question in which teachers were asked to indicate the frequency of use of computers in the classroom. The percentage of students whose regular teachers report that computers are not used in math is 31 percent for first-graders, 21 percent for fourth-graders, and 84 percent for eighth-graders. The corresponding figures for reading instruction are 31 percent, 21 percent, and 44 percent (see exhibits 4A.15 & 4A.16 in Appendix). For both reading and math instruction, high-poverty schools are the most likely to report that computers are not used in their regular classroom instruction. Of particular note are the findings for eighth-grade students, of whom 84 percent had teachers who report that they never use computers in the classroom.

Although students in high-poverty schools are most likely to not be exposed to computers in the classroom, the majority of students in such schools were in classrooms where computers are used to some degree. At least 70 percent of first- and fourth-grade students in high-poverty schools have math and/or reading teachers who report some use of computers. In addition, many first- and fourth-grade students are in classrooms where computers are used daily. For example, 31 percent of first-graders and 27 percent of fourth-graders in high-poverty schools are in classrooms in which teachers reported frequent use of computers (see Exhibits 4A.15 & 4A.16 in Appendix). First- and fourth-grade students in high-poverty schools are in classrooms at one of two extremes: one in which computers are never used and one in which computers are used daily. Eighth-grade students in general, and particularly those in high-poverty schools, are least likely to be in classrooms where computers are used, and when they are used, it is rarely on a daily basis.

Computers are used for many different purposes in classrooms. For math instruction, teachers most often identify the mastery of content area as a reason for computer use (68 percent, 60 percent, and 50 percent of the teachers of first-, fourth-, and eighth-grade students, respectively, gave this response). Other commonly cited reasons for using computers in math are to help in the presentation of concepts and to motivate and interest students (see Exhibit 4A.17 in Appendix). Students in high-poverty schools are more likely to have teachers who emphasize mastery, skills, and remediation in their computer use, while students in low-poverty schools are more likely to have teachers who emphasize mastery and teaching about computers.

The pattern of teachers' use of computers in reading instruction is similar to that in math instruction (see Exhibit 4A.18 in Appendix). First- and fourth-graders have reading/language arts teachers who stress concept mastery, teaching about computers, and to some extent, motivational elements. The teachers of eighth graders are more likely to emphasize computer usage targeted at improving writing and increasing motivation, with less emphasis on mastery of content and concepts. Again, teachers of students in high-poverty schools stress remediation more than those in low-poverty schools.

Finally, we examine the type of educational software utilized. The regular classroom teachers indicated their usage of specific software packages, such as integrated curricular systems (JOSTENS and CCC, IBM's Writing to Read, Pogrow's program HOTS), and other diskettes and programs. Students in high-poverty schools are most likely to have teachers who use the integrated computer assisted instructional packages, while those in low-poverty schools are more likely to use an eclectic approach, utilizing individual programs, not packages (see Exhibits 4A.19 & 4A.20 in Appendix).

CHAPTER V

COORDINATION OF SERVICES

V. COORDINATION OF SERVICES

OVERVIEW

This chapter focuses on the coordination of Chapter 1 and regular services. Coordination of services is a multilevel issue, including actions at the district and school level as well as at the classroom level. Consequently, this examination will incorporate data from the district coordinator, principal and the regular and Chapter 1 teachers.

- The most frequently used means of communication between regular and Chapter 1 teachers is informal discussion.
- Regular and Chapter 1 teachers report utilization of similar materials for instruction.
- Chapter 1 and regular classroom teachers agree that the primary responsibility for the student's instruction and progress rests with the regular classroom teacher.
- State Chapter 1 coordinators are influential in decisions made by district coordinators, especially in high-poverty schools.
- Districts report a modest degree of resource sharing between Chapter 1 and other compensatory education programs, especially in the area of district staffing. This reflects the practice in which district staff coordinate both Chapter 1 programs and other compensatory efforts.

COORDINATION BETWEEN CHAPTER 1 AND REGULAR TEACHERS

Exhibit 5.1 shows the frequency of communication between Chapter 1 and regular teachers, as reported by the regular teachers, in five areas: development of written lesson plans, meetings to discuss instructional coordination, informal discussions, sharing of written records, and provisions of common planning periods. Informal discussions are the most commonly used means of communication between the regular and Chapter 1 teachers. About 60 percent of the Chapter 1 teachers of grade 1 students report that they are involved in daily communication with regular teachers. Virtually all teachers say that they use this means of communication at least with some frequency. A common planning period is used on a daily basis by over 20 percent of the Chapter 1 and regular teachers.

The Chapter 1 teachers also report that they rely to a great extent on informal communication to coordinate instruction and communicate with the regular classroom teacher.

EXHIBIT 5.1

PERCENTAGE OF STUDENTS WHO ATTEND SCHOOLS IN WHICH PARTICULAR COORDINATION STRATEGIES ARE USED FREQUENTLY OR NOT AT ALL BY COHORT AND POVERTY CONCENTRATION OF THE SCHOOL[1]

COORDINATION PRACTICES - REGULAR TEACHER	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Chapter 1 and Regular Staff Consultation Lesson Plan						
Daily	6.09	0	0	19.59	6.98	7.76
Never	20.58	9.82	35.81	0	27.70	9.70
% Missing	48.89	78.19	44.44	47.87	26.22	50.25
Valid N	5655	487	1025	794	1560	1724
Valid WTD N	1817396	183998	406716	230301	675951	237322
Chapter 1 and Regular Staff Instructional Coordination						
Daily	5.97	0	0	16.30	6.86	8.68
Never	3.13	0	0	18.59	0	3.55
% Missing	49.21	78.19	47.36	41.34	28.21	50.44
Valid N	5483	487	976	760	1424	1771
Valid WTD N	1805814	183998	385374	259173	657703	236459
Chapter 1 and Regular Staff Informal Discussion						
Daily	57.52	55.83	64.27	71.28	59.20	47.15
Never	0.45	0	0	0	0	3.42
% Missing	47.04	78.19	44.44	38.55	24.48	48.52
Valid N	5918	487	1025	833	1649	1859
Valid WTD N	1882832	183998	406716	271497	691903	245611
Chapter 1 and Regular Staff Share Written Records						
Daily	9.09	0	6.59	28.45	6.46	10.12
Never	0.71	0	0	0	0	5.12
% Missing	51.45	78.19	44.44	50.66	26.16	49.49
Valid N	5631	487	1025	721	1579	1819
Valid WTD N	1726125	183998	406716	217977	676444	240990
Chapter 1 Regular Staff Common Planning Period						
Daily	22.14	32.24	6.96	18.82	31.87	15.08
Never	39.46	21.73	63.41	59.77	20.97	47.04
% Missing	52.50	78.96	47.36	50.66	27.18	49.49
Valid N	5403	415	976	721	1472	1819
Valid WTD N	1688953	177501	385374	217977	667110	240990

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[1] Source: *Prospects*, Teacher Questionnaire

EXHIBIT 5.1
(CONTINUED)

COORDINATION PRACTICES - REGULAR TEACHER	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Chapter 1 and Regular Staff Consultation Lesson Plan						
Daily	5.91	0	1.09	18.12	13.49	7.08
Never	27.33	34.51	39.57	11.87	31.06	10.06
% Missing	51.96	58.67	34.06	57.34	49.94	52.66
Valid N	5124	700	1056	724	1034	1545
Valid WTD N	1461662	399775	356598	193966	252181	189674
Chapter 1 and Regular Staff Instructional Coordination						
Daily	6.46	0	1.73	16.42	13.82	10.63
Never	8.29	26.22	0	3.71	0	4.04
% Missing	52.93	59.01	37.72	54.71	51.25	55.59
Valid N	4813	699	1006	607	956	1480
Valid WTD N	1432199	396476	336791	205899	245622	177943
Chapter 1 and Regular Staff Informal Discussion						
Daily	46.23	28.48	67.37	45.96	56.10	45.91
Never	0.47	0	0	0	0	3.90
% Missing	50.25	58.67	33.15	52.30	44.11	54.00
Valid N	5320	700	1061	705	1252	1537
Valid WTD N	1513514	399775	361533	216853	281579	184305
Chapter 1 and Regular Staff Share Written Records						
Daily	6.86	0	6.44	10.59	12.21	11.31
Never	0.79	0	0	0	0	6.12
% Missing	54.55	58.67	33.84	59.63	47.74	55.46
Valid N	4995	700	1057	627	1115	1496
Valid WTD N	1382874	399775	357800	183536	263279	178484
Chapter 1 Regular Staff Common Planning Period						
Daily	16.62	10.70	8.19	11.16	41.57	16.07
Never	49.02	58.76	61.03	38.41	28.83	44.14
% Missing	55.96	59.31	37.88	59.63	50.18	56.13
Valid N	4646	629	1005	627	986	1399
Valid WTD N	1339863	393590	335955	183536	251010	175771

EXHIBIT 5.1
(CONTINUED)

COORDINATION PRACTICES - REGULAR TEACHER	* TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Chapter 1 and Regular Staff Consultation Lesson Plan						
Daily	6.38	0.42	0	12.53	21.52	0
Never	19.84	5.66	34.07	22.11	28.24	5.67
% Missing	63.36	64.33	68.37	57.73	63.41	46.98
Valid N	2991	480	538	953	474	546
Valid WTD N	1078918	279475	255276	286417	147818	109931
Chapter 1 and Regular Staff Instructional Coordination						
Daily	1.11	0.34	0	0.06	7.76	0
Never	16.07	17.96	20.86	9.37	28.41	0
% Missing	61.14	55.85	68.37	57.73	63.62	46.98
Valid N	3110	600	538	953	473	546
Valid WTD N	1144489	345904	255276	286417	146962	109931
Chapter 1 and Regular Staff Informal Discussion						
Daily	43.48	26.54	55.62	56.68	16.11	67.50
Never						
% Missing	60.29	55.81	68.33	55.15	63.45	44.09
Valid N	3272	601	539	1049	475	608
Valid WTD N	1169340	346221	255665	303901	147637	115916
Chapter 1 and Regular Staff Share Written Records						
Daily	7.20	0.42	1.93	23.20	1.56	0
Never	5.95	0.17	2.53	5.45	28.41	0
% Missing	62.80	64.33	68.37	55.15	63.62	46.98
Valid N	3086	480	538	1049	473	546
Valid WTD N	1095545	279475	255276	303901	146962	109931
Chapter 1 Regular Staff Common Planning Period						
Daily	17.69	9.35	0	23.91	50.05	19.46
Never	55.83	52.73	84.55	56.63	49.95	2.71
% Missing	62.81	64.35	68.37	55.15	63.62	46.98
Valid N	3085	479	538	1049	473	546
Valid WTD N	1095385	279315	255276	303901	146962	109931
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

The service delivery model in use affects the communication patterns. For example, in the first grade cohort, 77 percent of the Chapter 1 teachers who use an in-class service delivery model never schedule a common planning period with the regular teacher. Instead, these Chapter 1 teachers rely on informal daily discussions with the regular teacher.

The poverty level of the school is related to the number of students and teachers with whom the Chapter 1 teacher needs to coordinate. Exhibit 5.2 shows the number of Chapter 1 students for whom Chapter 1 reading teachers must coordinate services. There are differences by type of model used, but the main differences are those associated with poverty. Teachers in high-poverty schools, for example must coordinate services for about 70 children, while the teachers in low-poverty schools must coordinate services for about half that number.

COORDINATION OF TEACHER RESPONSIBILITY

The Chapter 1 and regular teachers share responsibility for the educational and other outcomes of Chapter 1 students. The regular teachers and Chapter 1 teachers have very similar views about their responsibilities. Both groups see the regular teacher as having the primary responsibility, and also see that the regular and Chapter 1 teacher share responsibility. By and large, both groups are in agreement that the task of the Chapter 1 teacher is to reinforce regular instruction.

COORDINATION OF POLICY

Chapter 1 coordinators face many choices and decisions about the programs and policies to be put in place within their district. Who do they turn to or pay attention to or co-ordinate with as they approach these tasks?

The district coordinators indicate the extent to which they consult 2with other district coordinators, principals, Chapter 1 teachers, non-Chapter 1 teachers, school board, State Chapter 1 office, parents, counselors, and Technical Assistance Centers. The percentage of grade 1 students in districts where consultations with various offices or people occurred are displayed in Exhibit 5.3. Across all districts, Chapter 1 teachers, the State coordinator, and school principals appear to be key actors in the consultation by district coordinators. A noteworthy pattern is the greater reliance of high-poverty in comparison to low-poverty schools on State Chapter 1 office consultation.

Exhibit 5.2

Students coordinated by Chapter 1 teachers by poverty and model

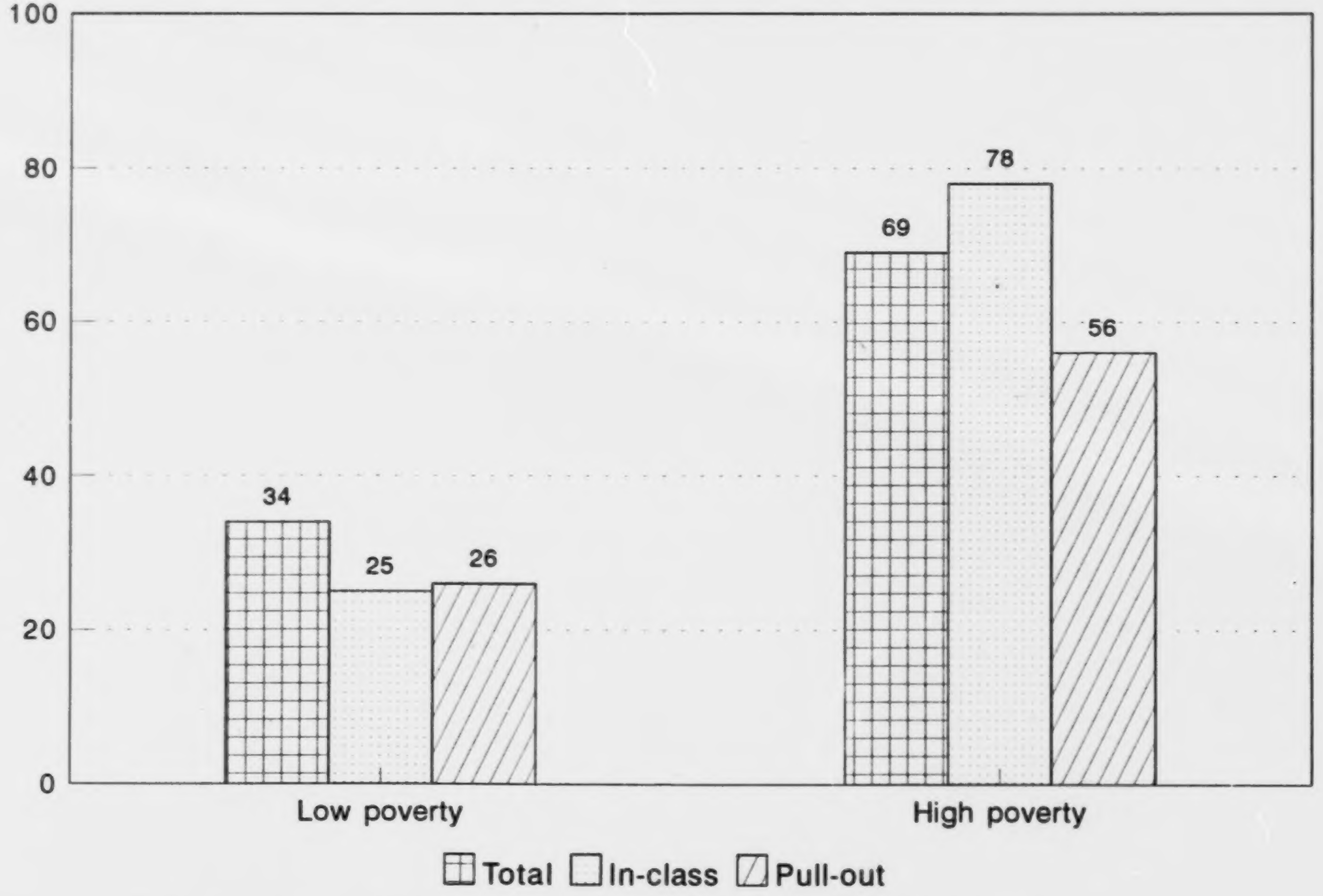

Exhibit reads: Chapter 1 teachers in low-poverty schools on average coordinate services for 34 students.

Source: Prospects, Chapter 1 Teacher Questionnaire

EXHIBIT 5.3
PARTIES CONSULTED BY DISTRICT CO-ORDINATOR IN PLANNING CHAPTER 1 PROGRAM BY COHORT AND POVERTY LEVEL[1]

PARTIES CONSULTED BY DISTRICT CHAPTER 1 COORDINATOR	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
District Administrators from Other Program	42.05	61.14	19.87	75.66	37.06	37.82
Principals	73.19	86.49	68.68	67.27	72.00	61.71
Chapter 1 Teachers	81.34	89.46	97.23	89.04	75.02	55.72
Non-Chapter 1 Teachers	56.29	58.36	68.75	54.81	55.04	49.56
Counselors	28.54	35.12	39.43	38.95	20.27	18.51
Parents	53.88	55.97	63.22	55.78	49.30	52.53
Representatives of Private School Children	22.38	14.93	38.41	6.28	21.83	29.79
Local Board of Education	21.07	24.23	13.27	24.21	26.54	16.23
Chapter 1 Staff in Other School District	33.17	23.23	35.01	37.44	34.08	34.88
State Chapter 1 Office	67.99	78.24	48.52	82.40	55.47	81.80
Technical Assistance Center	18.59	32.65	0	29.96	13.18	31.08
% Missing	16.49	13.22	12.22	38.82	17.85	10.51
Valid N	9076	1408	1368	880	2060	3087
Valid WTD N	2969323	732216	642574	270307	752600	426925
3RD GRADE COHORT						
District Administrators from Other Programs	45.16	49.31	21.75	77.80	51.88	39.18
Principals	74.18	88.88	60.03	71.05	71.93	63.11
Chapter 1 Teachers	81.61	91.01	93.17	83.43	76.90	58.24
Non-Chapter 1 Teachers	59.61	62.26	59.36	61.47	70.14	52.01
Counselors	29.80	43.52	19.14	44.75	23.42	18.63
Parents	56.83	58.94	50.02	63.71	63.89	55.53
Representatives of Private School Children	21.52	10.57	40.50	5.74	27.50	33.31
Local Board of Education	24.51	19.74	20.54	30.38	36.98	20.44
Chapter 1 Staff in Other School Districts	34.16	26.51	40.28	42.50	30.98	33.62

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[1] Source: *Prospects*, District Questionnaire

EXHIBIT 5.3
(CONTINUED)

PARTIES CONSULTED BY DISTRICT CHAPTER 1 COORDINATOR	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
State Chapter 1 Office	68.63	68.11	67.86	74.88	47.68	80.36
Technical Assistance Center	20.95	28.04	0.54	30.24	18.66	32.23
% Missing	22.52	22.80	21.90	38.83	13.87	14.57
Valid N	8671	1574	1301	963	1825	2743
Valid WTD N	2357452	746788	422379	278107	433898	342327
7TH GRADE COHORT						
District Administrators from Other Programs	44.29	58.47	12.54	52.55	77.10	36.48
Principals	71.67	81.28	57.31	72.79	96.40	49.96
Chapter 1 Teachers	84.31	82.47	95.05	83.35	86.32	51.88
Non-Chapter 1 Teachers	65.73	69.52	68.50	57.64	78.57	47.07
Counselors	31.34	49.19	22.58	33.27	11.04	31.75
Parents	61.97	66.11	66.58	53.71	66.66	49.23
Representatives of Private School Children	17.50	15.23	9.37	18.84	28.74	33.49
Local Board of Education	24.45	27.74	20.88	26.30	29.38	13.11
Chapter 1 Staff in Other School Districts	25.57	27.33	23.27	26.60	25.26	26.12
State Chapter 1 Office	69.24	67.55	82.65	51.35	56.96	98.22
Technical Assistance Center	21.69	29.47	19.32	13.30	4.36	59.03
% Missing	20.79	20.80	15.77	19.59	25.25	13.89
Valid N	6016	1189	1096	1636	1226	815
Valid WTD N	2332743	620605	679852	544907	301969	178517
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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COORDINATION VIA SHARING OF RESOURCES

Exhibit 5.4 details the percentage of students whose district Chapter 1 coordinator reported the specific sharing of resources with other compensatory education programs in the district. The most frequent sharing occurs via the staffing at the district level. This response probably indicates that the district Chapter 1 coordinator is likely to be the same person as the director for other compensatory services. Chapter 1 coordinators are often compensatory education coordinators as well. Low-poverty districts report this dual role far more frequently than do high-poverty districts (77 percent versus 27 percent).

COORDINATION OF TEACHING METHOD AND APPROACH

An important issue is the extent to which the instruction that takes place during Chapter 1 complements and reinforces regular instruction. Do the activities that take place in the regular and Chapter 1 instructional settings make sense when viewed from the perspective of the children who participate in both these settings? This type of question is at the heart of issues about coordination of instructional services. One particular example of this issue is the similarity and complementarity in approaches to reading instruction used by regular and Chapter 1 teachers. Preliminary analyses examine the extent to which Chapter 1 and regular teachers utilize the same or different approaches to reading. These analyses suggest that there is little congruence between the two instructional settings. It is not clear if these differences in approach are deleterious to the development of young children, especially for highly disadvantaged ones. Future analyses, combining the longitudinal achievement data with the curricular and service delivery data, will focus on this topic.

EXHIBIT 5.4
RESOURCES SHARED WITH OTHER COMPENSATORY EDUCATION DEPARTMENTS AS REPORTED BY THE DISTRICT COORDINATOR BY COHORT AND POVERTY LEVEL OF THE SCHOOL[1]

RESOURCES SHARED OTHER COMPENSATORY EDUCATION	TOTAL	Poverty				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Staff Teachers	32.48	53.89	39.42	35.64	26.72	11.63
Staff - Aides	23.66	19.20	39.24	11.87	20.57	18.63
Staff - Counselors	32.74	50.49	17.43	31.20	40.01	26.72
Staff School Level Administrators	45.45	50.49	53.74	30.66	64.68	26.12
Staff District - Level Administrator	60.68	76.70	68.89	35.61	87.85	26.79
Staff - Evaluators	18.92	19.20	4.03	23.75	27.43	21.45
Staff - Clerical	29.63	35.36	8.68	15.90	58.37	21.10
Staff - Specialists	28.97	11.78	4.03	24.40	79.67	12.71
Space - Classroom	48.13	80.06	31.04	39.40	67.38	18.55
Space - Resource Rooms	19.44	0	11.98	12.23	37.72	30.84
Space - Labs	25.35	0	23.07	15.90	62.78	15.59
Space - Meeting Rooms	45.96	23.30	59.57	29.96	87.50	21.81
Equipment/Materials - Computers	36.05	16.16	70.13	25.34	43.99	27.46
Equipment/Materials - Audio	35.06	16.16	74.77	24.09	25.19	43.34
Equipment/Materials - Curricular	56.66	65.67	78.10	18.68	69.05	44.64
Equipment/Materials - Enrichment	27.39	16.16	42.85	14.65	23.09	43.34
Equipment/Materials - Software	42.46	57.50	70.13	15.90	41.89	27.46
% Missing	59.55	66.25	63.69	56.97	60.61	42.31
Valid N	4919	513	650	630	953	1965
Valid WTD N	1438378	284722	265838	190110	360876	275237

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[1] Source: *Prospects*, District Questionnaire

EXHIBIT 5.4
(CONTINUED)

RESOURCES SHARED OTHER COMPENSATORY EDUCATION	TOTAL	Poverty				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Staff Teachers	33.29	53.37	48.92	23.89	32.42	12.14
Staff - Aides	26.00	20.21	45.06	17.77	24.00	20.14
Staff - Counselors	33.87	51.74	19.31	31.55	40.01	28.59
Staff School Level Administrators	38.21	51.74	44.93	27.68	46.85	26.13
Staff District - Level Administrator	51.02	75.51	64.78	28.61	65.90	25.19
Staff - Evaluators	17.19	20.21	5.29	22.29	19.86	18.68
Staff - Clerical	24.99	34.77	11.45	22.07	33.88	22.30
Staff - Specialists	23.77	9.45	6.33	38.87	52.74	13.10
Space - Classroom	46.29	83.03	37.12	35.80	51.81	24.66
Space - Resource Rooms	19.97	0	15.92	9.76	32.75	42.47
Space - Labs	20.96	0	27.83	10.24	48.38	21.25
Space - Meeting Rooms	41.29	24.49	55.19	28.51	78.31	28.22
Equipment/Materials - Computers	35.71	14.56	63.37	29.49	48.09	35.75
Equipment/Materials - Audio	34.03	14.56	68.89	27.27	29.15	45.48
Equipment/Materials - Curricular	51.17	62.82	73.66	23.80	54.96	48.00
Equipment/Materials - Enrichment	29.19	14.56	49.24	20.04	26.89	45.08
Equipment/Materials - Software	40.49	55.29	63.37	22.21	38.06	33.81
% Missing	63.03	75.56	67.73	58.18	51.76	44.23
Valid N	4674	574	582	682	990	1649
Valid WTD N	1124725	236369	174522	190129	243030	223451

EXHIBIT 5.4
(CONTINUED)

RESOURCES SHARED OTHER COMPENSATORY EDUCATION	TOTAL	Poverty				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Staff Teachers	29.68	28.10	24.04	43.74	16.84	1.50
Staff - Aides	25.73	23.76	36.37	25.84	16.84	29.18
Staff - Counselors	36.60	33.13	46.74	35.29	38.84	33.51
Staff School Level Administrators	37.65	56.57	46.88	12.65	46.47	39.71
Staff District - Level Administrator	46.33	81.92	24.18	36.40	25.74	16.37
Staff - Evaluators	23.43	29.89	0.14	29.25	17.94	11.54
Staff - Clerical	32.02	57.03	0	21.28	25.69	33.74
Staff - Specialists	23.19	23.92	0.14	37.03	10.55	11.32
Space - Classroom	55.67	87.63	73.69	34.48	32.43	37.19
Space - Resource Rooms	19.79	0	14.97	30.16	11.30	68.43
Space - Labs	26.44	36.23	17.89	22.08	12.76	38.46
Space - Meeting Rooms	37.48	23.91	46.74	49.83	27.64	37.19
Equipment/Materials - Computers	31.68	27.45	17.89	45.03	12.47	40.21
Equipment/Materials - Audio	33.50	33.21	17.89	35.75	22.29	63.08
Equipment/Materials - Curricular	45.81	70.57	26.95	35.04	19.75	66.86
Equipment/Materials - Enrichment	32.31	33.21	17.89	31.48	22.34	66.63
Equipment/Materials - Software	34.61	46.66	17.89	36.26	12.47	40.21
% Missing	61.91	55.56	84.33	42.67	59.85	56.86
Valid N	3372	545	325	1308	691	449
Valid WTD N	1121719	348215	126459	388505	162211	89437
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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APPENDIX A

SUPPORTING TABLES

EXHIBIT 1A.1
PERCENTAGE OF STUDENTS IN DISTRICTS THAT USED INDICATED DATA SOURCES TO IDENTIFY CHAPTER 1 ATTENDANCE AREAS OF SCHOOLS, BY POVERTY CONCENTRATION OF THE SCHOOLS

DATA SOURCES USED FOR CHAPTER 1 ELIGIBILITY DETERMINATION	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Census Data on Family Income	4.05	3.41	0	12.87	4.33	4.18
AFDC Enrollment	26.23	25.17	26.13	26.68	28.31	28.37
Free Breakfast Counts	4.08	0	7.93	9.02	4.24	5.38
Free and/or Reduced Price Lunch Counts	95.64	95.93	92.93	87.89	100.0	93.85
Number Non-English Speaking Families	3.88	0	0	0	10.77	4.92
Number Neglected/Delinquent Children	7.94	13.96	4.59	25.26	2.17	2.97
Number of Migrant Children	2.05	5.16	0	0	2.17	0
Other	2.18	0	0	23.30	0	0.85
% Missing	35.38	22.96	55.45	54.95	31.26	9.63
Valid N	8193	1216	948	782	1899	3140
Valid WTD N	2297680	650040	326123	199046	629724	431153
3RD GRADE COHORT						
Census Data on Family Income	5.99	6.95	0.49	10.27	6.75	6.12
AFDC Enrollment	32.01	32.62	28.65	39.11	32.84	33.86
Free Breakfast Counts	5.06	0.04	10.69	6.77	7.47	7.01
Free and/or Reduced Price Lunch Counts	93.69	95.35	92.59	87.94	94.39	93.29
Number Non-English-Speaking Families	3.65	0	0	0	12.74	5.98
Number Neglected/Delinquent Children	8.19	11.27	5.46	22.57	3.91	2.21
Number of Migrant Children	1.86	3.84	0.16	0.63	2.68	0
Other	4.00	0	0	24.32	5.37	0.90
% Missing	41.09	39.88	54.66	55.02	30.20	13.91
Valid N	7594	1294	863	861	1600	2776
Valid WTD N	1792398	58160	24518	20451	35165	344948
7TH GRADE COHORT						
Census Data on Family Income	7.34	14.30	0.71	7.80	13.74	0
AFDC Enrollment	27.86	33.73	12.72	33.17	27.32	46.69
Free Breakfast Counts	8.34	13.95	2.95	12.38	9.42	0
Free and/or Reduced Price Lunch Counts	95.87	95.02	98.69	92.87	94.28	98.22
Number Non-English-Speaking Families	2.48	0	0	11.34	0	0
Number Neglected/Delinquent Children	11.99	19.57	15.22	11.15	1.05	0
Number of Migrant Children	1.22	4.81	0	0	0	0
Other	3.75	0	0.03	15.55	0	3.39
% Missing	39.51	42.38	35.39	42.53	42.16	13.89
Valid N	5059	879	932	1353	1026	815
Valid WTD N	1781463	451458	521480	389478	233637	178517
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 1A.2
PERCENTAGE OF STUDENTS IN DISTRICTS THAT USED INDICATED APPROACHES TO ALLOCATING RESOURCES OF SELECTED CHAPTER 1 SCHOOLS BY POVERTY CONCENTRATION OF THE SCHOOLS

APPROACH FOR ALLOCATING RESOURCES	TOTAL	School Poverty Concentration				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT						
Equal resources to same/similar grades	36.47	32.07	58.95	51.92	30.07	20.48
Allocate by level of educational deprivation	37.79	33.95	24.77	37.63	35.25	62.86
Allocate by level of economic deprivation	17.48	15.86	16.28	10.45	33.74	1.91
Other	8.26	18.11	0	0	0.94	14.74
% Missing	2.27	0	0	0	6.16	5.06
Valid N	7930	1216	948	782	1756	3020
Valid WTD N	2217101	650040	326123	199046	573275	407022
3RD GRADE COHORT						
Equal resources to same/similar grades	39.56	32.00	62.24	48.05	41.55	22.47
Allocate by level of educational deprivation	36.69	32.40	20.97	42.52	30.28	63.01
Allocate by level of economic deprivation	15.51	19.04	16.51	9.43	26.81	1.90
Other	8.25	16.56	0.28	0	1.35	12.62
% Missing	1.73	0	0	0.49	6.49	2.72
Valid N	7449	1294	863	860	1519	2715
Valid WTD N	1739646	581608	245189	202297	318942	334050
7TH GRADE COHORT						
Equal resources to same/similar grades	36.71	24.00	53.71	44.35	24.81	15.32
Allocate by level of educational deprivation	44.97	36.55	29.30	55.65	60.65	71.68
Allocate by level of economic deprivation	12.68	24.64	16.99	0	9.54	0
Other	5.64	14.82	0	0	5.00	13.00
% Missing	1.58	0	0	0.41	5.63	10.22
Valid N	4933	879	932	1352	953	763
Valid WTD N	1734793	451458	521480	386727	210911	157325
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
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7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 1A.3
PERCENTAGE OF CHAPTER 1 FUNDS EXPENDED ON SALARIES, STAFF DEVELOPMENT, COMPUTERS AND MATERIALS
COHORT 1

PERCENT OF ALL CHAPTER 1 FUNDS EXPENDED ON:	TOTAL	SCHOOL POVERTY CONCENTRATION				
		0-19%	20-34%	35-49%	50-74%	75-100%
Teacher salaries	53.28	55.02	60.65	50.55	55.16	42.99
Administrator salaries	2.86	1.56	1.77	3.57	2.89	5.99
Other certified salaries	1.52	1.80	.82	.88	.52	3.90
Aides	16.94	14.42	13.71	13.07	18.53	17.47
Clerical	2.33	5.89	1.21	1.74	1.00	1.62
Other salaries	.67	.33	.80	.50	.31	1.90
Staff development	1.43	2.12	1.03	1.87	1.00	1.58
Computers	3.38	2.64	2.49	7.82	3.91	2.83
Materials	5.07	5.33	5.51	5.47	4.00	6.25
Other	12.52	10.89	12.01	14.53	12.68	15.47

EXHIBIT 1A.4
PERCENTAGE OF SUPPORT CONTRIBUTED BY CHAPTER 1 FUNDS
COHORT 1

PERCENT OF FTEs PAID FOR WITH CHAPTER 1 FUNDS	TOTAL	SCHOOL POVERTY CONCENTRATION				
		0-19%	20-34%	35-49%	50-74%	75-100%
Administrator	2.41	4.44	2.2	5.95	.32	1.33
Regular teachers	1.28	.15	.19	6.66	.44	2.13
Remedial teachers	68.61	31.81	84.58	83.54	67.85	82.46
Aides	35.38	26.41	25.24	40.25	47.89	51.45
Special ed	.39	0.89	0.21	1.91	.12	1.04
Special ed aides	.67	.0	.0	3.55	.24	1.90
ESL teachers	6.50	0.0	4.65	0.87	8.53	12.62
ESL teacher aides	8.97	0	15.43	0.	8.77	9.75
Parent liaisons	23.00	0.	21.74	0.	20.00	41.54
Social workers	0.	0.	0.	0.	0.	0.
Counselors	2.05	0.00	0.00	0.00	4.29	10.91
Psychologists	0.00	0.00	0.00	0.00	0.00	0.00
Librarians	.06	0.00	0.00	0.00	0.00	.56

EXHIBIT 1A.4 (CONT)
PERCENTAGE OF SUPPORT CONTRIBUTED BY CHAPTER 1 FUNDS
COHORT 3

PERCENT OF FTES PAID FOR WITH CHAPTER 1 FUNDS	TOTAL	SCHOOL POVERTY CONCENTRATION				
		0-19%	20-34%	35-49%	50-74%	75-100%
Administrator	6.10	10.91	3.75	6.25	1.06	5.51
Regular teachers	1.59	.80	.23	5.16	1.57	1.79
Remedial teachers	66.45	51.69	77.10	71.17	70.07	81.82
Aides	32.51	9.35	41.29	30.10	44.61	54.27
Special ed	5.98	13.54	0.00	4.82	5.16	.96
Special ed aides	7.22	16.32	0.00	7.25	5.44	1.51
ESL teachers	18.34	23.29	8.62	0.00	19.58	19.85
ESL teacher aides	13.13	0.00	25.75	4.659	10.65	15.05
Parent liaisons	18.78	.27	33.88	20.09	15.26	33.39
Social workers	.90	0.	9.14	0.	0.00	2.83
Counselors	1.99	0.005	0100	0.40	5.68	12.42
Psychologists	.40	0.00	0.09	0.00	1.52	1.99
Librarians	6.02	16.55	.25	0.00	2.39	.57

EXHIBIT 1A.4 (CONT)
PERCENTAGE OF SUPPORT CONTRIBUTED BY CHAPTER 1 FUNDS
COHORT 7

PERCENT OF FTES PAID FOR WITH CHAPTER 1 FUNDS	TOTAL	SCHOOL POVERTY CONCENTRATION				
		0-19%	20-34%	35-49%	50-74%	75-100%
Administrator	3.16	5.75	3.80	0.00	0.00	3.85
Regular teachers	2.79	5.89	2.19	.386	.60	2.97
Remedial teachers	57.46	48.84	75.81	49.12	53.27	75.47
Aides	32.35	.1512	18.19	46.89	68.31	72.82
Special ed	1.07	0.00	2.19	1.59	0.00	.754
Special ed aides	.94	.0	2.33	.045	0.00	2.42
ESL teachers	.540	0.00	0.00	0.00	0.00	16.64
ESL teacher aides	1.13	0.00	0.003	0.00	0.00	66.80
Parent liaisons	9.72	2.64	0.004	13.19	0.000	27.94
Social workers	0.	0.	0.	0.	0.	0.
Counselors	1.08	0.00	2.32	0.43	0.85	2.78
Psychologists	0.00	0.00	0.00	0.00	0.00	0.00
Librarians	.70	0.00	2.19	0.00	0.00	0.00

EXHIBIT 1A.5
AVERAGE YEARS TOTAL TEACHING EXPERIENCE AND YEARS TEACHING IN THIS SCHOOL FOR MATHEMATICS TEACHERS BY COHORT AND SCHOOL POVERTY CONCENTRATION

MATH TEACHER'S AVERAGE EXPERIENCE	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
How Many Years Teaching Elem. or Secondary	12.65	12.79	12.16	14.29	12.25	12.71
% Missing	15.67	19.43	13.20	9.65	9.24	26.43
Valid N	8914	1385	1462	1287	2124	2548
Valid WTD N	2998207	679789	635411	399176	831516	350982
How Many Years Teaching at This School	8.08	7.55	8.57	8.98	7.63	7.89
% Missing	15.80	18.73	13.20	12.00	9.24	26.43
Valid N	8903	1405	1462	1256	2124	2548
Valid WTD N	2993709	685675	635411	388794	831516	350982
3RD GRADE COHORT						
How Many Years Teaching Elem. or Secondary	13.86	14.67	13.52	14.28	12.83	13.16
% Missing	20.74	16.81	11.41	20.13	23.87	27.78
Valid N	8368	1555	1484	1122	1751	2339
Valid WTD N	2411554	804706	479099	363094	383560	289366
How Many Years Teaching at This School	8.58	8.81	9.23	7.08	8.88	8.32
% Missing	21.30	16.81	11.41	20.13	27.41	27.57
Valid N	8374	1555	1484	1122	1734	2362
Valid WTD N	2394529	804706	479099	363094	365689	290213
7TH GRADE COHORT						
How Many Years Teaching Elem. or Secondary	15.67	15.57	18.05	13.55	14.68	16.16
% Missing	23.69	23.94	16.91	16.44	29.31	44.11
Valid N	5549	1166	1169	1587	1050	571
Valid WTD N	2247228	595931	670631	566271	285581	115866
How Many Years Teaching at This School	10.12	9.85	12.35	8.11	9.42	10.89
% Missing	23.55	23.94	16.91	16.08	28.89	44.11
Valid N	5567	1166	1169	1593	1062	571
Valid WTD N	2251353	595931	670631	568727	287249	115866
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 1A.6
AVERAGE YEARS TOTAL TEACHING EXPERIENCE AND YEARS TEACHING IN THIS SCHOOL FOR ENGLISH TEACHERS BY COHORT AND SCHOOL POVERTY CONCENTRATION

MATH TEACHER'S AVERAGE EXPERIENCE	TOTAL	School Poverty Concentration				
		10-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
How Many Years Teaching Elem. or Secondary	12.64	12.81	12.18	14.28	12.25	12.60
% Missing	15.67	19.54	13.01	9.65	9.24	26.53
Valid N	8912	1386	1466	1287	2124	2541
Valid WTD N	2998284	678912	636829	399176	831516	350519
How Many Years Teaching at This School	8.16	7.91	8.55	8.97	7.63	7.85
% Missing	15.82	18.98	13.01	11.92	9.24	26.53
Valid N	8898	1402	1466	1257	2124	2541
Valid WTD N	2992989	683620	636829	389174	831516	350519
3RD GRADE COHORT						
How Many Years Teaching Elem. or Secondary	14.00	14.79	13.57	13.65	12.88	13.19
% Missing	20.68	17.07	11.70	19.93	23.34	27.19
Valid N	8389	1541	1478	1127	1756	2370
Valid WTD N	2413432	802198	477508	364034	386222	291743
How Many Years Teaching at This School	8.90	9.08	9.01	7.52	9.27	8.37
% Missing	21.06	16.82	11.70	19.93	26.29	26.97
Valid N	8410	1552	1478	1127	1742	2394
Valid WTD N	2401872	804637	477508	364034	371331	292635
7TH GRADE COHORT						
How Many Years Teaching Elem. or Secondary	15.20	14.18	15.61	14.98	16.30	18.09
% Missing	26.61	23.24	17.85	25.34	32.44	48.98
Valid N	5258	1179	1097	1493	988	496
Valid WTD N	2161220	601417	663091	505957	272915	105771
How Many Years Teaching at This School	9.69	9.14	9.69	9.60	10.07	13.28
% Missing	26.57	23.24	17.85	25.16	32.44	48.98
Valid N	5263	1179	1097	1498	988	496
Valid WTD N	2162401	601417	663091	507138	272915	105771
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 1A.7

PERCENTAGE OF STUDENTS WHOSE MATHEMATICS TEACHERS ARE FULL-TIME, REGULAR PART TIME AND PERMANENT SUBSTITUTES BY COHORT AND SCHOOL POVERTY CONCENTRATION

EMPLOYMENT STATUS IN SCHOOL SYSTEM	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Regular Full-Time	97.84	97.31	98.88	98.63	96.76	98.01
Regular Part-Time	0.07	0.26	0	0.08	0	0
Permanent Substitute Teacher	1.52	0.91	0.86	0.86	2.84	1.99
Other	0.57	1.52	0.26	0.43	0.40	0
% Missing	15.37	18.73	13.20	9.65	9.24	25.41
Valid N	8984	1405	1462	1287	2124	2598
Valid WTD N	3008982	685675	635411	399176	831516	355872
3RD GRADE COHORT						
Regular Full-Time	97.28	95.43	97.75	99.37	99.85	94.73
Regular Part-Time	0.87	2.57	0	0	0	0.08
Permanent Substitute Teacher	0.84	0	1.60	0.63	0.07	3.44
Other	1.02	2.00	0.64	0	0.08	1.75
% Missing	20.60	16.81	11.41	19.66	23.67	27.51
Valid N	8400	1555	1484	1129	1752	2363
Valid WTD N	2415793	804706	479099	365244	384548	290469
7TH GRADE COHORT						
Regular Full-Time	97.93	96.13	100.00	98.74	97.88	93.20
Regular Part-Time	0.75	2.08	0	0.80	0	0
Permanent Substitute Teacher	0.60	0	0	0	1.91	6.80
Other	0.72	1.79	0	0.46	0.21	0
% Missing	23.17	23.94	16.91	16.08	26.11	44.11
Valid N	5605	1166	1169	1593	1100	571
Valid WTD N	2262599	595931	670631	568727	298495	115866
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 1A.8

PERCENTAGE OF STUDENTS WHOSE ENGLISH/LANGUAGE ARTS TEACHERS REGULAR FULL-TIME, REGULAR PART-TIME AND PERMANENT SUBSTITUTES BY COHORT AND SCHOOL POVERTY CONCENTRATION

EMPLOYMENT STATUS IN SCHOOL SYSTEM	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Regular Full-Time	97.86	97.17	99.16	98.63	96.74	97.97
Regular Part-Time	0.10	0.39	0	0.08	0	0
Permanent Substitute Teacher	1.47	0.91	0.58	0.86	2.84	2.03
Other	0.57	1.53	0.26	0.43	0.41	0
% Missing	15.40	18.98	13.01	9.65	9.24	25.50
Valid N	8978	1402	1466	1287	2124	2591
Valid WTD N	3007881	683620	636829	399176	831516	355408
3RD GRADE COHORT						
Regular Full-Time	97.00	95.78	95.77	99.37	99.73	94.79
Regular Part-Time	0.75	2.22	0	0	0	0.08
Permanent Substitute Teacher	0.83	0	1.61	0.63	0.07	3.39
Other	1.42	2.00	2.62	0	0.20	1.73
% Missing	20.34	16.82	11.70	19.32	22.55	26.90
Valid N	8438	1552	1478	1136	1760	2395
Valid WTD N	2423751	804637	477508	366798	390190	292891
7TH GRADE COHORT						
Regular Full-Time	96.99	97.30	97.60	98.77	92.49	96.28
Regular Part-Time	0.18	0.59	0.06	0	0	0
Permanent Substitute Teacher	1.58	1.91	0.80	0.92	3.36	3.42
Other	1.24	0.20	1.54	0.31	4.15	0.30
% Missing	26.52	23.24	17.65	25.16	32.44	48.98
Valid N	5269	1179	1103	1498	988	496
Valid WTD N	2163963	601417	664653	507138	272915	105771
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 1A.9

PERCENTAGE OF STUDENTS WHOSE MATHEMATICS TEACHERS ARE CERTIFIED REGULAR TEACHERS AND WHO HAVE RECEIVED SPECIFIC CERTIFICATION BY COHORT AND SCHOOL POVERTY CONCENTRATION

TYPE OF TEACHING CERTIFICATION	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Not Certified	0.48	0	0	0.96	0.64	1.48
Permanent Regular/Standard Certification	94.94	95.11	92.71	93.91	96.91	93.70
Probationary Certification	1.85	2.61	1.82	2.51	1.59	0.88
Temp/Provision/Emer Certification	2.60	2.28	5.47	2.62	0.86	2.81
Alternative Certification	0.13	0	0	0	0	1.12
% Missing	15.46	18.73	13.20	9.82	9.59	25.23
Valid N	8982	1405	1462	1285	2107	2615
Valid WTD N	3005832	685675	635411	398416	828296	356703
3RD GRADE COHORT						
Not Certified	0.99	0.83	1.73	0	1.72	0.75
Permanent Regular/Standard Certification	89.23	87.90	97.30	91.89	86.82	82.68
Probationary Certification	2.97	6.27	0.07	4.99	0.46	0.32
Temp/Provision/Emer Certification	6.77	4.99	0.90	3.12	11.00	15.87
Alternative Certification	0.04	0	0	0	0	0.37
% Missing	20.65	16.81	11.41	19.66	23.67	27.91
Valid N	8389	1555	1484	1129	1752	2352
Valid WTD N	2414191	804706	479099	365244	384548	288866
7TH GRADE COHORT						
Not Certified	0.71	0	0.37	0.28	1.83	5.52
Permanent Regular/Standard Certification	91.63	93.20	92.63	88.52	95.44	82.92
Probationary Certification	1.81	1.79	2.55	1.09	2.10	0.44
Temp/Provision/Emer Certification	5.03	1.99	4.46	9.99	0.63	11.12
Alternative Certification	0.83	3.02	0	0.13	0	0
% Missing	23.71	24.63	16.91	16.08	26.21	44.78
Valid N	5590	1165	1169	1593	1098	561
Valid WTD N	2246641	590556	670631	568727	298065	114475
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 1A.10

PERCENTAGE OF STUDENTS WHOSE ENGLISH/LANGUAGE ARTS TEACHERS ARE CERTIFIED REGULAR TEACHERS AND WHO HAVE RECEIVED SPECIFIC CERTIFICATION BY COHORT AND SCHOOL POVERTY CONCENTRATION

TYPE OF TEACHING CERTIFICATION	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Not Certified	0.54	0.26	0	0.96	0.64	1.49
Permanent Regular/Standard Certification	94.99	94.84	92.89	93.91	96.90	94.35
Probationary Certification	1.86	2.62	1.81	2.51	1.60	0.88
Temp/Provisional/Emergency Certification	2.57	2.29	5.30	2.62	0.86	2.84
Alternative Certification	0.05	0	0	0	0	0.44
% Missing	15.50	18.98	13.01	9.91	9.59	25.33
Valid N	8975	1402	1466	1284	2107	2608
Valid WTD N	3004352	683620	636829	398036	828296	356239
3RD GRADE COHORT						
Not Certified	0.87	0.78	1.29	0	1.69	0.74
Permanent Regular/Standard Certification	90.09	87.96	97.45	93.11	86.90	81.27
Probationary Certification	3.00	6.27	0.19	4.97	0.34	0.60
Temp/Provisional/Emergency Certification	5.99	4.99	1.06	1.92	11.06	17.02
Alternative Certification	0.04	0	0	0	0	0.37
% Missing	20.39	16.82	11.70	19.32	22.55	27.33
Valid N	8426	1552	1478	1136	1760	2383
Valid WTD N	2422027	804637	477508	366798	390190	291167
7TH GRADE COHORT						
Not Certified	0.73	0.02	0.36	0.17	4.38	0.37
Permanent Regular/Standard Certification	94.79	98.73	92.59	95.39	90.18	95.22
Probationary Certification	2.18	0.18	5.61	1.65	0	0.09
Temp/Provisional/Emergency Certification	2.29	1.07	1.43	2.76	5.45	4.33
Alternative Certification	0.01	0	0	0.04	0	0
% Missing	27.03	23.93	17.65	25.16	32.55	49.17
Valid N	5263	1178	1103	1498	986	495
Valid WTD N	2149004	596042	664653	507138	272484	105380
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 1A.11
PERCENTAGE OF STUDENTS WHOSE MATHEMATICS TEACHERS HAVE RECEIVED A GRADUATE DEGREE

	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Do you have a Graduate Degree	39.76	42.90	30.73	38.63	44.43	42.21
% Missing	15.75	18.73	13.30	10.43	9.80	26.31
Valid N	8907	1405	1453	1266	2099	2576
Valid WTD N	2995350	685675	643664	395739	826364	351576
3RD GRADE COHORT						
Do you have a Graduate Degree	43.40	45.60	39.78	51.79	37.41	46.21
% Missing	21.70	16.81	11.41	20.61	28.78	28.39
Valid N	8306	1555	1484	1115	1690	2345
Valid WTD N	2382222	804706	479099	360945	358822	286923
7TH GRADE COHORT						
Do you have a Graduate Degree	47.61	52.63	53.16	34.59	43.64	68.03
% Missing	23.78	24.83	16.91	16.83	27.44	44.39
Valid N	5550	1158	1169	1570	1077	570
Valid WTD N	2244609	589001	670631	563631	293108	115289
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 1A.12
PERCENTAGE OF STUDENTS WHOSE ENGLISH/LANGUAGE ARTS TEACHERS HAVE RECEIVED A GRADUATE DEGREE

	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Do you have a Graduate Degree?	40.28	45.85	29.93	38.63	44.49	42.32
% Missing	15.78	18.98	13.11	10.43	9.80	26.35
Valid N	8902	1402	1457	1266	2099	2570
Valid WTD N	2994482	683620	636082	395739	826364	351345
3RD GRADE COHORT						
Do you have a Graduate Degree?	44.63	49.32	37.69	51.95	39.47	47.19
% Missing	20.85	16.82	11.79	21.36	23.01	27.79
Valid N	8375	1552	1477	1119	1733	2377
Valid WTD N	2408111	804637	477016	357528	387858	289345
7TH GRADE COHORT						
Do you have a Graduate Degree?	49.96	58.94	53.13	37.15	40.27	70.68
% Missing	26.93	23.68	17.63	25.16	32.61	51.46
Valid N	5243	1174	1104	1498	985	479
Valid WTD N	2151804	598034	664846	507138	272249	100627
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 3A.1
PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 MATH TEACHERS REPORT PARTICULAR BASIS FOR GROUPING PRACTICES BY POVERTY CONCENTRATION OF THE SCHOOL

CHAPTER 1 PRIMARY BASIS FOR FORMING MATH INSTRUCTION	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Similar Math Ability	75.92	100.00	--	100.00	62.52	73.65
Diversity of Abilities	7.33	0	--	0	6.05	14.28
Same Language Other than English	4.15	0	--	0	0	12.07
Handicapping Condition	--	--	--	--	--	--
Unit Topics or Subject Matter	--	--	--	--	--	--
No Basis/Random	12.60	0	--	0	31.42	0
Other Basis (Specify)	--	--	--	--	--	--
% Missing	99.31	99.53	100.00	99.48	98.93	98.23
Valid N	213	21	--	7	84	101
Valid WTD N	24540	3996	--	2276	9838	8430
3RD GRADE COHORT						
Similar Math Ability	79.77	100.00	0	78.50	100.00	78.19
Diversity of Abilities	8.55	0	0	21.50	0	0
Same Language Other than English	--	--	--	--	--	--
Handicapping Condition	--	--	--	--	--	--
Unit Topics or Subject Matter	0.31	0	0	0	0	0.80
No Basis/Random	3.26	0	100.00	0	0	0
Other Basis (Specify)	8.12	0	0	0	0	21.01
% Missing	98.92	99.91	99.80	97.13	98.97	96.84
Valid N	187	13	[illegible]	40	22	86
Valid WTD N	32783	846	1068	13028	5178	12662
7TH GRADE COHORT						
Similar Math Ability	30.72	--	--	36.05	41.75	0
Diversity of Abilities	21.70	--	--	0	0	97.12
Same Language Other than English	--	--	--	--	--	--
Handicapping Condition	--	--	--	--	--	--
Unit Topics or Subject Matter	28.53	--	--	0	58.25	2.88
No Basis/Random	19.05	--	--	63.95	0	0
Other Basis (Specify)	--	--	--	--	--	--
% Missing	99.81	100.00	100.00	99.76	99.34	99.40
Valid N	31	--	--	3	12	16
Valid WTD N	5549	--	--	1653	2656	1240
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 3A.2
THE AVERAGE PERCENTAGE OF TIME SPENT BY STUDENTS IN INDIVIDUAL, SMALL GROUPS AND WHOLE CLASS INSTRUCTION IN ENGLISH/READING/LANGUAGE ARTS AS REPORTED BY THEIR CHAPTER 1 TEACHERS BY POVERTY CONCENTRATION OF THE SCHOOL

BASIS ON WHICH INSTRUCTIONAL GROUPS ARE FORMED	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Similar Reading/English/Language Arts Ability	40.24	100.00	48.20	39.74	22.33	52.03
Diversity of Abilities	31.95	0	51.80	31.27	41.20	22.46
Same Language other than English	0.90	0	0	0	2.23	0
Handicapping Condition	--	--	--	--	--	--
Compensatory Education Students are Grouped Together	14.31	0	0	28.99	22.75	4.71
Unit Topics or Subject Matter	1.87	0	0	0	0	4.89
No Basis/Random	6.95	0	0	0	4.49	13.45
Other Basis	3.78	0	0	0	7.00	2.45
% Missing	94.91	99.16	98.51	95.37	91.98	85.54
Valid N	643	14	29	70	241	289
Valid WTD N	180916	7117	10931	20455	73437	68977
3RD GRADE COHORT						
Similar Reading/English/Language Arts Ability	37.53	--	72.66	59.26	45.32	27.40
Diversity of Abilities	30.66	--	0	40.74	31.41	32.90
Same Language other than English	--	--	--	--	--	--
Handicapping Condition	--	--	--	--	--	--
Compensatory Education Students are Grouped Together	4.71	--	0	0	0	11.31
Unit Topics or Subject Matter	--	--	--	--	--	--
No Basis/Random	25.57	--	27.34	0	9.81	28.40
Other Basis	1.52	--	0	0	13.46	0
% Missing	97.96	100.00	99.76	95.51	98.61	93.55
Valid N	301	--	9	62	64	159
Valid WTD N	62025	--	1278	20392	7017	25857

EXHIBIT 3A.2
(CONTINUED)

BASIS ON WHICH INSTRUCTIONAL GROUPS ARE FORMED	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
7TH GRADE COHORT						
Similar Reading/English/Language Arts Ability	23.41	0	--	0	56.01	0
Diversity of Abilities	24.37	0	--	0	36.30	60.92
Same Language other than English	--	--	--	--	--	--
Handicapping Condition	2.88	0	--	7.64	0	0
Compensatory Education Students are Grouped Together	--	--	--	--	--	--
Unit Topics or Subject Matter	10.36	100.00	--	0	7.69	11.58
No Basis/Random	37.87	0	--	92.36	0	20.16
Other Basis	1.11	0	--	0	0	7.34
% Missing	99.30	99.86	100.00	98.85	97.86	98.49
Valid N	92	5	–	47	27	13
Valid WTD N	20681	1116	–	7798	8644	3124
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 3A.3
PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 MATH TEACHERS REPORT THAT COMPUTERS ARE NEVER OR ARE FREQUENTLY USED BY POVERTY CONCENTRATION OF SCHOOL

WHICH DESCRIBES YOUR INSTRUCTIONAL USE OF COMPUTERS	TOTAL	POVERTY				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Computers are not used	23.52	14.03	17.53	51.82	0.20	31.11
Computers used nearly every day	17.48	36.87	8.20	3.98	43.04	16.66
% Missing	0.77	0	0.49	0.10	1.31	2.38
Valid N	468	38	58	78	137	154
Valid WTD N	105449	6222	29525	25332	22571	17963
3RD GRADE COHORT						
Computers are not used	30.69	41.78	28.30	38.78	6.42	19.39
Computers used nearly every day	26.48	45.60	22.07	42.64	17.91	22.18
% Missing	1.44	0	0.22	0	2.58	7.36
Valid N	633	45	94	96	100	291
Valid WTD N	125884	14349	32938	21827	16849	32439
7TH GRADE COHORT						
Computers are not used	15.93	7.78	0	0	82.08	9.53
Computers used nearly every day	45.34	92.22	2.70	62.28	0	40.94
% Missing	1.45	0.28	0.21	3.97	1.33	3.22
Valid N	158	10	14	75	16	2406
Valid WTD N	48743	5735	6679	25125	8636	942
Total N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 3A.4
PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 ENGLISH/READING/LANGUAGE ARTS TEACHERS REPORT THAT COMPUTERS ARE NEVER OR FREQUENTLY USED BY POVERTY CONCENTRATION OF SCHOOL

WHICH DESCRIBES YOUR INSTRUCTIONAL USE OF COMPUTERS	TOTAL	SCHOOL POVERTY CONCENTRATION				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Computers are not used	37.48	30.75	8.72	33.14	44.95	44.27
Computers used nearly every day	20.24	26.39	33.95	12.38	13.43	28.44
% Missing	1.44	0	1.04	1.56	1.79	4.26
Valid N	1503	66	170	153	496	610
Valid WTD N	399569	18170	56317	45679	168331	100844
3RD GRADE COHORT						
Computers are not used	33.25	41.86	34.89	21.96	20.37	33.89
Computers used nearly every day	23.86	10.40	8.69	39.71	29.14	28.46
% Missing	1.70	0	0.34	0.68	4.42	6.10
Valid N	1173	64	148	175	181	598
Valid WTD N	240407	37243	41520	51790	27337	75036
7TH GRADE COHORT						
Computers are not used	27.23	67.68	21.02	14.33	1.32	27.58
Computers used nearly every day	25.85	28.39	0	33.59	30.50	18.55
% Missing	1.38	0	0.36	0.72	5.02	6.08
Valid N	320	46	30	111	44	86
Valid WTD N	83833	20039	12002	29236	13471	8480
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	1,452	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	1,392	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,913	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 3A.5
PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 READING/ENGLISH/LANGUAGE ARTS TEACHERS REPORT FREQUENT OR NO USE OF INDICATED INSTRUCTIONAL MATERIALS BY POVERTY CONCENTRATION OF THE SCHOOL

ENGLISH TEACHERS	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT						
Textbooks						
Frequent Use	16.88	31.69	15.44	20.15	8.07	31.93
Never Used	41.63	45.74	43.45	8.91	50.76	39.28
Literature and/or Trade Books						
Frequent Use	55.75	33.42	25.25	58.21	79.16	34.13
Never Used	9.60	0	15.72	15.85	4.58	15.86
Basal Reader						
Frequent Use	17.65	46.55	26.16	38.83	11.90	8.90
Never Used	39.59	18.50	34.09	8.99	46.10	44.26
Children's Newspaper and/or Magazines						
Frequent Use	1.83	0	6.80	0	1.10	1.63
Never Used	35.92	42.65	59.76	30.73	23.01	43.59
Adult Newspaper and/or Magazines						
Frequent Use	0.17	0	0	0	0.37	0
Never Used	64.45	95.39	78.79	64.79	53.93	67.49
Language Experience Stories						
Frequent Use	39.13	4.61	14.69	51.63	55.98	24.03
Never Used	9.46	0	17.64	1.10	5.36	19.59
Reading/English/Language Arts Kits						
Frequent Use	9.37	33.87	25.17	2.87	6.99	3.36
Never Used	44.20	13.90	24.17	46.00	53.56	39.61
Computers with R/E/LA Instructional Software						
Frequent Use	45.12	27.18	69.84	46.83	44.12	37.26
Never Used	36.99	58.93	14.88	22.07	41.12	41.79
Controlled Vocabulary Materials						
Frequent Use	31.86	21.05	34.14	15.89	27.59	49.02
Never Used	34.40	28.26	17.51	41.93	44.42	20.19
Other R/E/LA Instructional Material						
Frequent Use	56.80	13.51	52.02	89.48	66.48	42.22
Never Used	36.80	86.49	37.42	0	24.84	56.25
% Missing	8.52	1.68	6.29	7.53	14.78	13.38
Valid N	635	26	43	47	224	295
Valid WTD N	122030	3979	17861	13533	44466	42192

EXHIBIT 3A.5
(CONTINUED)

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Textbooks						
Frequent Use	40.08	20.81	35.93	27.52	47.11	46.13
Never Used	20.77	9.05	29.68	21.39	21.82	21.26
Literature and/or Trade Books						
Frequent Use	55.42	71.22	33.70	44.98	51.73	71.98
Never Used	9.99	0	27.24	9.66	3.31	10.97
Basal Reader						
Frequent Use	28.43	13.10	37.74	20.25	44.06	17.08
Never Used	35.21	43.55	27.56	37.87	21.73	45.93
Children's Newspaper and/or Magazines						
Frequent Use	6.06	0	11.41	2.71	3.82	10.33
Never Used	25.70	18.26	44.20	41.60	20.80	17.33
Adult Newspaper and/or Magazines						
Frequent Use	2.94	0	8.18	0	0	4.71
Never Used	32.85	29.74	16.07	51.29	46.55	25.61
Language Experience Stories						
Frequent Use	20.81	6.45	7.11	23.54	22.86	30.79
Never Used	16.35	0	32.10	23.64	13.58	13.49
Reading/English/Language Arts Kits						
Frequent Use	14.68	2.10	13.14	0.57	22.75	24.20
Never Used	40.98	40.69	43.74	43.74	12.33	40.80
Computers with R/E/LA Instructional Software						
Frequent Use	40.31	35.93	37.57	35.38	46.85	43.19
Never Used	31.56	52.21	34.57	28.43	19.60	29.05
Controlled Vocabulary Materials						
Frequent Use	26.37	50.81	9.78	2.29	24.22	36.44
Never Used	26.64	27.15	44.60	35.49	18.41	19.17
Other R/E/LA Instructional Material						
Frequent Use	37.02	100.0	4.54	44.85	31.95	14.67
Never Used	49.41	0	88.83	45.75	42.21	54.02
% Missing	5.83	2.22	4.74	6.10	6.62	15.39
Valid N	459	26	46	109	66	212
Valid WTD N	84797	13045	16508	26373	8867	2003
7TH GRADE COHORT						
Textbooks						
Frequent Use	36.75	4.04	24.13	35.11	47.42	61.52
Never Used	11.07	20.79	0	4.83	10.69	18.52

EXHIBIT 3A.5
(CONTINUED)

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
Literature and/or Trade Books						
Frequent Use	69.89	86.02	63.70	73.26	77.30	42.50
Never Used	0.47	0	0	0.77	0	1.51
Basal Reader						
Frequent Use	16.18	6.88	0	3.22	43.92	13.65
Never Used	53.43	61.97	66.24	26.01	25.27	77.80
Children's Newspaper and/or Magazines						
Frequent Use	16.58	6.88	14.21	47.26	6.63	0
Never Used	23.56	61.97	16.95	7.57	14.49	20.87
Adult Newspaper and/or Magazines						
Frequent Use	26.04	9.94	28.63	5.48	67.12	1.10
Never Used	11.88	15.75	15.74	3.15	2.07	31.31
Language Experience Stories						
Frequent Use	13.08	0	1.21	45.77	4.08	6.13
Never Used	28.65	69.60	35.07	20.64	2.29	38.33
Reading/English/Language Arts Kits						
Frequent Use	18.55	5.05	16.95	35.25	34.32	1.10
Never Used	43.48	65.22	9.92	39.15	16.81	74.28
Computers with R/E/LA Instructional Software						
Frequent Use	34.01	26.35	68.83	59.00	20.05	8.62
Never Used	33.83	69.60	16.95	36.74	0.53	61.99
Controlled Vocabulary Materials						
Frequent Use	21.64	24.52	11.13	43.38	16.81	1.10
Never Used	34.36	69.60	0	51.00	11.59	74.28
Other R/E/LA Instructional Material						
Frequent Use	53.21	75.72	77.91	7.45	15.15	72.40
Never Used	32.14	0	22.09	53.40	72.90	16.56
% Missing	3.35	2.04	1.02	4.48	7.02	7.36
Valid N	126	12	19	23	27	44
Valid WTD N	25232	4052	6680	836	4868	5705
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.1

PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT THAT THEY EMPHASIZE A PARTICULAR APPROACH OR CONTENT AREA BY POVERTY CONCENTRATION OF THE SCHOOL

APPROACH/CONTENT	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT						
Whole Numbers /Whole Number Operations	91.34	87.01	98.70	95.96	92.30	85.58
Problem Solving	57.49	61.46	44.69	61.16	57.07	57.69
Common/Decimal Fractions and/or Percent	4.08	0	3.12	10.63	3.02	9.37
Ratio and Proportion	3.10	4.34	3.45	0	1.79	6.85
Measurement and/or Tables and Graphs	22.35	30.45	10.49	11.76	29.78	18.60
Geometry	5.78	0.31	2.82	13.22	6.31	16.58
Algebra (Formulas and Equations)	3.66	0	0	26.73	0	7.45
Trigonometry	1.53	0	0	0	0	7.45
Probability and Statistics	4.06	0	0	8.64	3.94	15.85
Calculus	1.59	0	0	0	0	7.25
Learning Mathematics Facts and Concepts	87.97	85.87	88.11	96.02	86.97	82.47
Learning Skills to Solve Word Problems	66.70	65.59	60.71	71.09	65.36	69.01
Developing Reasoning and Analytic Ability	34.82	38.82	24.86	31.08	30.63	46.54
Learning to Communicate Ideas in Mathematics	32.84	42.92	22.46	30.92	23.99	40.92
Applications of Math Skills to Life	49.83	51.18	27.19	53.03	58.23	50.92
Appreciation for Importance of Math	62.27	68.03	38.85	70.08	64.40	67.72
Student Confidence in Ability to Do Math	81.27	84.06	75.00	81.14	83.44	77.25
Develop Perception of Math as Enjoyable	62.09	64.46	41.14	69.09	67.46	63.75
Awareness of Application of Math to Real Life	60.00	76.24	37.98	57.90	56.66	64.64
% Missing	92.76	91.03	94.85	91.46	94.58	88.15
Valid N[1]	878	159	142	87	118	372
Valid WTD N	257384	75725	37724	37740	49674	56521

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[1] The valid N for each item varies as a results of a "not applicable" response category. The valid N reported here is the minimum across the response categories.

EXHIBIT 4A.1
(CONTINUED)

APPROACH/CONTENT	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Whole Numbers /Whole Number Operations	82.55	81.17	84.38	78.43	80.58	85.72
Problem Solving	73.28	81.59	64.37	61.75	70.95	72.95
Common/Decimal Fractions and/or Percent	21.92	21.73	24.15	21.45	15.95	27.74
Ratio and Proportion	6.78	5.15	7.04	8.15	9.60	7.87
Measurement and/or Tables and Graphs	30.49	30.24	25.29	29.89	36.69	35.29
Geometry	13.60	8.95	21.40	9.51	17.76	11.54
Algebra (Formulas and Equations)	5.11	4.23	0	10.49	10.60	4.09
Trigonometry	0.33	0	0	0	0	3.36
Probability and Statistics	3.24	2.51	6.24	1.67	2.00	4.97
Calculus	0.32	0	0	0	0	3.17
Learning Mathematics Facts and Concepts	91.21	91.59	95.92	85.81	87.00	91.54
Learning Skills to Solve Word Problems	77.31	82.73	69.96	72.66	71.16	80.40
Developing Reasoning and Analytic Ability	52.71	61.28	40.66	37.90	57.62	51.15
Learning to Communicate Ideas in Mathematics	49.02	51.07	42.28	35.13	52.70	49.85
Applications of Math Skills to Life	52.47	55.19	47.19	48.42	56.97	52.30
Appreciation for Importance of Math	67.76	74.71	64.05	62.33	57.00	63.89
Student Confidence in Ability to Do Math	82.57	86.94	89.57	71.60	76.29	74.51
Develop Perception of Math as Enjoyable	63.42	63.79	60.65	57.31	63.53	62.80
Awareness of Application of Math to Real Life	68.43	70.89	62.42	63.23	69.12	66.93
% Missing	74.57	68.77	66.81	82.47	77.30	80.67
Valid N	2380	394	547	274	424	692
Valid WTD N	773752	302145	179468	79711	114377	77453

EXHIBIT 4A.1
(CONTINUED)

APPROACH/CONTENT	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
7TH GRADE COHORT						
Whole Numbers /Whole Number Operations	37.51	22.73	32.89	50.29	45.61	54.15
Problem Solving	60.25	50.80	60.47	59.23	74.51	76.40
Common/Decimal Fractions and/or Percent	53.35	42.11	45.36	66.64	63.20	66.72
Ratio and Proportion	41.90	31.22	35.46	53.15	46.77	63.99
Measurement and/or Tables and Graphs	26.37	30.60	16.50	23.62	41.34	36.28
Geometry	19.54	22.45	15.92	16.23	25.81	29.40
Algebra (Formulas and Equations)	51.10	51.33	51.73	49.88	59.36	39.96
Trigonometry	3.32	7.20	0	0.54	12.48	4.04
Probability and Statistics	9.01	14.39	2.19	6.85	9.42	27.10
Calculus	0.39	0.82	0	0.76	0	0
Learning Mathematics Facts and Concepts	64.80	62.49	65.83	63.50	68.23	74.67
Learning Skills to Solve Word Problems	64.58	68.29	62.77	56.06	70.71	86.51
Developing Reasoning and Analytic Ability	53.57	62.66	56.45	43.51	48.85	57.91
Learning to Communicate Ideas in Mathematics	40.24	52.81	43.23	27.09	39.95	30.40
Applications of Math Skills to Life	40.07	37.34	43.65	36.27	36.89	60.33
Appreciation for Importance of Math	54.26	63.39	55.19	41.15	57.65	64.44
Student Confidence in Ability to Do Math	67.28	77.08	76.09	47.07	64.44	83.07
Develop Perception of Math as Enjoyable	44.88	43.77	49.32	38.54	49.00	49.29
Awareness of Application of Math to Real Life	55.93	59.39	62.33	48.64	42.71	75.69
% Missing	74.55	78.98	64.30	69.56	90.81	76.89
Valid N	1882	332	552	608	204	184
Valid WTD N	749547	164665	288147	206270	37144	47907
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 4A.2
PERCENTAGE OF STUDENTS WHOSE READING/ENGLISH/LANGUAGE ARTS TEACHERS WHO REPORT THAT THEY EMPHASIZE A PARTICULAR APPROACH OR CONTENT AREA BY POVERTY CONCENTRATION OF THE SCHOOL

TEXT MATERIALS EMPHASIS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Fiction	60.69	69.62	59.08	65.41	50.62	53.38
Poetry	16.43	18.46	19.38	17.11	9.01	19.83
Mythology/Folk Tales	11.85	12.62	10.65	15.72	8.79	18.74
Biography	2.86	4.79	2.98	1.35	2.52	1.63
Drama	5.53	7.17	0.78	4.78	5.29	14.81
Expository Text	5.70	14.90	3.98	0.58	1.07	3.95
Other Non-fiction	6.63	7.11	9.92	11.89	2.53	5.30
Developing Reading Readiness Skills	71.34	67.93	67.44	73.19	77.46	79.89
Developing Listening Skills	80.47	71.88	74.47	88.87	84.53	85.43
Learning Word Analysis Skills	73.98	67.35	78.12	77.54	69.50	79.27
Learning Vocabulary/Word Meanings	72.30	63.55	63.72	83.85	74.98	80.11
Learning Manuscript Writing	50.19	47.06	43.50	54.47	51.09	60.31
Learning Cursive Writing	10.99	0.69	5.06	28.22	2.34	12.50
Learning Spelling Skills	44.51	34.44	51.28	41.89	47.14	42.88
Learning Writing and Composition Skills	59.20	70.56	50.52	57.15	52.83	58.49
Learning Grammar	39.55	32.62	44.72	41.41	36.12	41.96
Learning to Follow Directions	84.95	82.87	76.68	94.19	86.79	93.34
Learning to Comprehend Facts/Details	73.61	64.90	76.42	89.03	75.41	75.68
Learning to Identify the Main Idea	61.92	56.39	61.30	74.76	63.43	71.50
Remember Sequence of Significant Events	72.52	70.46	70.91	76.95	78.25	79.56
Differentiate Fact From Opinion	36.24	28.38	35.47	44.29	39.36	46.39
Learning to Draw Inferences	44.91	36.07	42.25	49.31	51.68	58.42
Learning to Read Charts and Graphs	41.29	45.20	27.48	47.65	48.13	45.24
Learning Note-Taking, Study Skills	8.37	22.47	3.28	8.32	0.55	13.35
Learning to Use Life Skills Materials	8.16	19.67	1.23	8.74	3.74	10.16
Criteria to Evaluate Reading Materials	11.49	19.77	2.85	17.55	3.28	16.52
Developing Oral Communication	62.97	61.19	59.72	60.49	69.70	60.87
Developing an Appreciation For Reading	96.86	97.94	97.42	95.32	96.18	96.10
Developing an Appreciation For Writing	84.25	97.49	66.00	82.58	84.99	86.59
Develop Student Confidence-Reading Ability	97.94	98.54	98.06	96.20	98.64	96.39
Develop Student Confidence-Writing Ability	87.81	98.09	74.46	87.16	88.58	87.01
Improve Understanding of Value of Reading	91.67	95.78	87.44	91.01	91.86	89.27
% Missing	3.74	0.81	2.58	1.76	6.99	3.64
Valid N[2]	8523	1384	1413	1199	2051	2411
Valid WTD N	2834522	676759	603114	370449	762628	338465

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[2] The valid N for each item varies as a result of a "not applicable" response category. The valid N reported here is the minimum across the response categories.

EXHIBIT 4A.2
(CONTINUED)

TEXT MATERIALS EMPHASIS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Fiction	63.69	68.02	56.31	66.13	62.03	53.63
Poetry	15.74	20.38	13.56	8.97	18.31	15.37
Mythology/Folk Tales	17.30	27.89	14.85	13.01	10.01	10.66
Biography	14.46	17.90	12.49	23.38	9.08	7.85
Drama	7.07	6.24	8.85	3.49	11.45	7.27
Expository Text	14.34	12.77	10.44	10.80	28.06	15.20
Other Non-fiction	25.34	26.40	22.07	19.18	26.75	12.36
Developing Reading Readiness Skills	43.05	42.17	46.99	31.70	24.66	52.70
Developing Listening Skills	50.73	50.31	41.23	50.99	48.12	58.85
Learning Word Analysis Skills	41.14	23.88	47.47	51.90	35.35	57.82
Learning Vocabulary/Word Meanings	72.05	62.44	71.27	78.10	74.36	83.32
Learning Manuscript Writing	15.67	13.73	15.79	9.23	22.64	21.25
Learning Cursive Writing	27.14	20.50	32.47	19.35	34.11	45.69
Learning Spelling Skills	50.27	43.38	50.27	46.08	49.77	62.73
Learning Writing and Composition Skills	69.06	76.63	51.93	75.25	57.87	76.61
Learning Grammar	50.86	48.51	51.62	42.44	44.62	61.69
Learning to Follow Directions	75.39	78.63	71.94	64.86	74.15	81.26
Learning to Comprehend Facts/Details	78.23	78.83	71.83	78.47	81.04	77.69
Learning to Identify the Main Idea	76.86	71.06	79.31	85.25	72.82	78.09
Remember Sequence of Significant Events	68.86	65.19	69.04	67.51	69.51	72.04
Differentiate Fact From Opinion	61.89	60.12	63.88	62.40	54.80	63.09
Learning to Draw Inferences	69.32	69.10	71.63	65.88	65.76	67.37
Learning to Read Charts and Graphs	54.88	49.92	56.77	56.13	52.00	56.90
Learning Note-Taking, Study Skills	31.42	30.09	23.94	33.60	29.38	30.92
Learning to Use Life Skills Materials	20.37	22.87	13.71	14.39	16.16	26.39
Criteria to Evaluate Reading Materials	16.35	18.04	10.10	8.73	13.50	22.01
Developing Oral Communication	45.82	45.22	43.54	48.40	37.71	54.02
Developing an Appreciation For Reading	89.53	92.21	86.26	91.83	81.03	93.68
Developing an Appreciation For Writing	71.60	74.71	63.20	79.44	58.65	76.98
Develop Student Confidence-Reading Ability	85.96	90.38	75.45	91.28	82.10	86.74
Develop Student Confidence-Writing Ability	73.41	80.37	60.13	81.70	61.18	75.29
Improve Understanding of Value of Reading	86.35	87.81	83.63	84.69	84.63	88.17
% Missing	1.83	1.34	0.29	1.30	1.55	2.01
Valid N	8133	1523	1474	1095	1735	2237
Valid WTD N	2342818	786721	475636	350677	382095	275878

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EXHIBIT 4A.2
(CONTINUED)

TEXT MATERIALS EMPHASIS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Fiction	65.22	66.32	67.46	64.64	61.08	67.02
Poetry	13.26	12.21	10.17	12.85	19.91	25.76
Mythology/Folk Tales	14.69	12.02	18.04	7.67	22.92	26.36
Biography	15.81	5.80	15.64	20.68	23.67	30.45
Drama	19.49	11.74	19.68	24.83	22.06	32.95
Expository Test	13.97	7.62	23.81	9.03	15.57	21.79
Other Non-fiction	17.50	14.77	17.58	15.77	13.20	57.89
Developing Reading Readiness Skills	28.04	18.98	30.94	22.48	41.76	54.80
Developing Listening Skills	42.11	38.49	38.49	39.72	52.94	77.00
Learning Word Analysis Skills	25.37	33.28	11.21	17.45	39.09	62.21
Learning Vocabulary/Word Meanings	49.73	67.26	35.62	40.79	52.28	74.20
Learning Manuscript Writing	15.94	13.49	15.25	19.34	16.41	19.90
Learning Cursive Writing	6.85	5.82	1.48	11.48	3.97	28.53
Learning Spelling Skills	29.58	26.17	20.95	29.39	49.43	47.13
Learning Writing and Composition Skills	71.94	83.65	69.03	60.08	74.56	84.01
Learning Grammar	41.51	45.88	36.69	30.13	54.94	61.87
Learning to Follow Directions	54.74	58.94	48.41	43.78	71.35	78.65
Learning to Comprehend Facts/Details	62.09	70.85	47.40	57.83	78.62	77.28
Learning to Identify the Main Idea	52.58	52.07	37.10	52.17	78.57	86.81
Remember Sequence of Significant Events	43.35	43.59	28.75	42.29	67.98	72.08
Differentiate Fact From Opinion	43.19	37.27	34.81	44.91	64.85	71.49
Learning to Draw Inferences	54.02	51.57	45.82	50.75	78.32	76.03
Learning to Read Charts and Graphs	15.00	12.32	7.39	12.57	27.19	54.51
Learning Note-Taking, Study Skills	39.46	44.13	38.67	24.84	53.53	56.36
Learning to Use Life Skills Materials	15.30	12.80	11.14	13.18	21.72	51.44
Criteria to Evaluate Reading Materials	16.67	8.22	18.90	14.54	29.20	39.39
Developing Oral Communication	37.35	34.58	29.52	34.38	53.34	80.30
Developing an Appreciation For Reading	81.22	88.90	81.12	76.08	74.06	84.46
Developing an Appreciation For Writing	70.68	80.69	60.75	66.75	71.67	92.23
Develop Student Confidence-Reading Ability	75.85	79.41	76.74	73.43	67.43	87.46
Develop Student Confidence-Writing Ability	74.69	81.96	72.84	67.07	72.67	89.09
Improve Understanding of Value of Reading	78.42	81.86	74.71	80.13	73.14	89.68
% Missing	3.68	0.51	6.59	3.32	4.42	5.23
Valid N	5038	1136	1026	1461	940	472
Valid WTD N	2028695	583211	594710	488537	260210	90141
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3555521	843743	732050	441820	916133	477074
3rd Grade Cohort	3042496	967336	540786	454634	503801	400688
7th Grade Cohort	2945025	783549	807155	677665	403963	207325

EXHIBIT 4A.3

PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT THAT THEY UTILIZE SPECIFIC PEDAGOCIAL APPROACHES BY POVERTY CONCENTRATION OF THE SCHOOL

	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Madeline Hunter's Methods	61.42	71.06	70.91	38.21	67.15	49.53
Mastery Learning	32.31	40.49	21.18	27.06	34.33	40.18
Cooperative Learning	74.67	85.12	81.18	39.41	81.40	69.21
Individualized Instruction	41.11	31.76	41.83	21.65	49.70	48.02
% Missing	0.29	0	0	0.04	0.89	0.39
Total Valid N	8837	1405	1411	1263	2049	2601
Total Valid Wtd N	2967257	685675	614630	393068	818756	353796
3RD GRADE COHORT						
Madeline Hunter's Methods	72.24	82.61	72.64	64.97	55.49	64.53
Mastery Learning	47.85	43.64	32.59	57.72	58.11	50.46
Cooperative Learning	79.21	80.11	75.45	83.49	80.00	70.23
Individualized Instruction	35.94	37.39	34.15	33.13	38.95	37.39
% Missing	1.24	0.03	0.22	3.64	1.27	3.36
Total Valid N	8122	1534	1430	1068	1695	2278
Total Valid Wtd N	2355423	800713	468676	340494	376700	277113
7TH GRADE COHORT						
Madeline Hunter's Methods	66.25	65.41	68.62	68.08	63.45	57.45
Mastery Learning	28.30	16.10	32.86	26.73	40.57	39.09
Cooperative Learning	62.49	79.48	55.52	53.63	56.84	70.98
Individualized Instruction	18.17	6.86	21.19	21.34	17.97	36.40
% Missing	1.12	0.66	0	1.58	1.38	4.48
Total Valid N	5467	1157	1166	1607	1037	495
Total Valid Wtd N	2234247	588540	669047	571274	284045	110683
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 4A.4
PERCENTAGE OF STUDENTS WHOSE READING/ENGLISH/LANGUAGE ARTS TEACHERS REPORT THAT THEY UTILIZE SPECIFIC PEDAGOGICAL APPROACHES BY POVERTY CONCENTRATION OF THE SCHOOL

PEDAGOGICAL APPROACH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Madeline Hunter's Methods	59.84	69.60	73.13	37.93	58.28	46.71
Mastery Learning	30.41	33.46	31.85	11.46	29.98	40.09
Cooperative Learning	70.24	84.91	65.65	35.71	84.07	55.33
Phonetic Reading Program	54.23	53.87	53.97	56.66	51.15	56.58
Whole Language Reading	66.55	78.97	60.05	71.32	69.60	57.63
Writing Process Methods	55.28	68.53	46.32	43.45	57.03	50.06
Individualized Instruction	37.81	39.27	32.58	34.39	45.40	40.49
Other Innovative Classroom Methods	13.99	8.54	8.77	14.53	16.15	14.98
None of the Above Methods to Teach English	1.10	0.73	2.64	0	1.42	0
% Missing	17.63	18.98	19.52	14.54	9.95	26.25
Valid N	8808	1402	1409	1234	2086	2569
Valid WTD N	2928562	683620	589151	377581	825017	351861
3RD GRADE COHORT						
Madeline Hunter's Methods	72.12	84.29	69.84	62.31	60.20	61.20
Mastery Learning	40.60	37.55	28.39	35.19	53.40	41.31
Cooperative Learning	73.04	82.07	72.68	69.27	74.53	57.35
Phonetic Reading Program	17.58	15.28	20.78	16.73	20.26	21.41
Whole Language Reading	64.03	73.40	55.97	64.76	63.21	46.57
Writing Process Methods	69.11	73.55	58.05	77.01	69.09	62.80
Individualized Instruction	27.47	32.19	15.44	30.76	29.06	30.38
Other Innovative Classroom Methods	10.80	15.28	7.21	17.64	6.07	5.36
None of the Above Methods to Teach English	0.61	0.73	0	0	0.92	1.92
% Missing	22.41	18.03	11.75	22.80	26.37	30.77
Valid N	8194	1529	1477	1102	1705	2265
Valid WTD N	2360734	792893	477219	350970	370965	277418

EXHIBIT 4A.4
(CONTINUED)

PEDAGOGICAL APPROACH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Madeline Hunter's Methods	57.54	54.26	67.80	59.47	41.85	46.86
Mastery Learning	27.15	23.22	21.84	31.59	38.65	33.42
Cooperative Learning	74.59	80.30	74.42	68.21	79.94	54.25
Phonetic Reading Program	8.18	4.99	3.45	12.15	12.43	22.80
Whole Language Reading	61.06	56.55	58.09	72.05	56.18	77.95
Writing Process Methods	74.80	80.71	75.94	67.60	72.56	65.79
Individualized Instruction	33.75	40.45	20.40	44.03	21.81	58.22
Other Innovative Classroom Methods	14.78	22.53	13.71	7.99	14.12	6.43
None of the Above Methods to Teach English	1.30	2.10	1.29	0.32	1.44	0.59
% Missing	31.27	22.55	21.50	35.60	39.10	55.45
Valid N	4879	1165	1036	1328	885	462
Valid WTD N	2024111	606880	633603	436446	246012	92372
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.5
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT SPECIFIC GROUPING PRACTICES BY POVERTY CONCENTRATION OF THE SCHOOL

GROUPING STRATEGIES	TOTAL	School Poverty Concentration				
		019%	20-34%	35-49%	50-74%	75-100%
1st Grade Cohort						
How is Class Put Into Instruction Groups:						
Not Divided - Whole Class Activity	72.07	92.71	77.98	86.45	52.60	62.93
Not Divided - Individual Instruction	4.69	1.36	5.29	0.66	5.81	5.72
Divided Into Two Math Groups	8.23	1.99	4.27	5.64	14.13	18.12
Divided Into Three Math Groups	7.84	0.47	0.16	1.90	19.81	5.25
Divided Into Four Math Groups	2.72	3.46	0.19	0	5.55	2.37
Divided Into Five or More Groups	4.44	0	12.10	5.34	2.11	5.62
% Missing	22.01	20.41	22.34	17.55	14.79	31.02
Valid N	8338	1368	1316	1169	2035	2404
Valid WTD N	2772951	671572	568528	364289	780673	329074
Primary Basis for Forming Instruction Groups:						
Similar Math Ability	56.10	74.31	7.36	67.56	75.65	37.75
Diversity of Abilities	27.29	0	50.12	27.01	19.13	37.99
Same Language Other Than English	0.72	0	0	0	0.78	1.82
Handicapping Condition	0.13	0	0	0	0	0.70
All Comparable Educated Students Together	0.71	0	0	5.44	0.47	0
Unit Topics or Subject Matter	0.08	0	0	0	0	0.40
No Basis/Random	11.90	25.69	41.02	0	3.97	6.55
Other Basis	3.07	0	1.50	0	0	14.81
% Missing	84.16	95.29	87.01	88.76	70.36	77.54
Valid N	1873	112	237	197	574	753
Valid WTD N	563268	39776	95098	49664	271563	107167

EXHIBIT 4A.5
(CONTINUED)

GROUPING STRATEGIES	**TOTAL**	**School Poverty Concentration**				
		019%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
3rd Grade Cohort						
How is Class Put Into Instruction Groups:						
Not Divided - Whole Class Activity	79.64	76.43	83.10	90.41	86.29	55.07
Not Divided - Individual Instruction	3.24	3.25	2.47	0.75	4.15	7.29
Divided Into Two Math Groups	9.52	11.78	7.94	3.11	3.17	24.56
Divided Into Three Math Groups	4.14	5.95	4.08	4.78	0.76	4.16
Divided Into Four Math Groups	1.75	1.97	1.17	0	1.33	5.30
Divided Into Five or More Groups	1.72	0.61	1.24	0.95	4.30	3.62
% Missing	26.80	23.85	17.37	26.75	31.71	31.26
Valid N	7848	1430	1373	1034	1651	2244
Valid WTD N	2227215	736595	446850	333022	344049	275429
Primary Basis for Forming Instruction Groups:						
Similar Math Ability	73.43	87.67	83.32	84.32	21.83	62.38
Diversity of Abilities	13.65	2.03	11.52	1.88	52.47	21.44
Same Language Other Than English	0.27	0	0	0	0	0.99
Handicapping Condition	0.23	0	0	0	0.62	0.33
All Comparable Educated Students Together	0.58	0	0	7.60	0	0
Unit Topics or Subject Matter	4.63	0.57	0	0	21.58	8.47
No Basis/Random	6.65	9.72	4.34	6.20	3.49	4.81
Other Basis	0.56	0	0.83	0	0	1.57
% Missing	87.59	84.53	89.22	93.67	92.75	74.30
Valid N	1633	186	178	139	298	830
Valid WTD N	377434	149630	58305	28758	36511	102971

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EXHIBIT 4A.5
(CONTINUED)

GROUPING STRATEGIES	TOTAL	School Poverty Concentration				
		019%	20-34%	35-49%	50-74%	75-100%
7th Grade Cohort						
How is Class Put Into Instruction Groups:						
Not Divided - Whole Class Activity	74.59	67.86	83.87	76.15	72.66	56.46
Not Divided - Individual Instruction	5.89	5.92	2.56	5.59	9.15	17.63
Divided Into Two Math Groups	3.95	0.19	3.94	7.87	2.33	8.35
Divided Into Three Math Groups	0.68	0.75	0.42	0.46	0.46	0.71
Divided Into Four Math Groups	1.52	1.93	0.27	1.66	2.46	3.32
Divided Into Five or More Groups	13.37	23.35	8.94	8.28	12.93	13.53
% Missing	26.74	25.67	22.91	18.63	32.63	42.76
Valid N	5306	1123	1096	1506	1001	574
Valid WTD N	2157558	582422	622231	551415	272131	118666
Primary Basis for Forming Instruction Groups:						
Similar Math Ability	15.02	6.59	18.79	20.59	10.20	34.01
Diversity of Abilities	55.96	67.32	43.14	51.84	77.26	11.82
Same Language Other Than English	0.19	0	0	0	0.38	2.07
Handicapping Condition	0.58	0.58	1.23	0.47	0	0
All Comparable Educated Students Together	0.12	0	0	0.63	0	0
Unit Topics or Subject Matter	3.73	0	2.87	16.40	0	0
No Basis/Random	20.30	16.70	30.92	10.08	12.17	52.11
Other Basis	4.09	8.81	3.05	0	0	0
% Missing	86.69	80.51	89.54	89.01	87.75	86.62
Valid N	981	296	79	233	245	126
Valid WTD N	391978	152702	84406	74479	49496	27735
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.6

PERCENTAGE OF STUDENTS WHOSE READING/ENGLISH/LANGUAGE ARTS TEACHERS WHO REPORT SPECIFIC GROUPING PRACTICES BY POVERTY CONCENTRATION OF THE SCHOOL

HOW IS READING/ENGLISH/LANGUAGE ARTS CLASS USUALLY DIVIDED	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Not Divided/Class Activity	37.43	49.18	57.69	35.10	14.91	21.31
Not Divided/Individual Instruction	2.82	4.65	2.08	0.88	2.73	3.29
Divided into 2 groups	13.69	5.20	13.16	12.10	20.79	19.06
Divided into 3 groups	28.77	26.25	21.17	32.25	35.66	32.52
Divided into 4 groups	12.94	14.72	3.65	16.70	16.05	17.21
Divided 5 or more groups	4.36	0	2.25	2.96	9.85	6.61
% Missing	22.20	22.22	16.55	17.33	18.13	29.77
Valid N	8375	1344	1404	1157	2006	2426
Valid WTD N	2766173	656290	610909	365272	750077	335039
3RD GRADE COHORT						
Not Divided/Class Activity	74.14	79.25	82.32	65.82	74.19	49.65
Not Divided/Individual Instruction	3.93	2.50	4.81	6.76	2.91	5.27
Divided into 2 groups	11.33	8.02	8.37	11.76	12.11	27.01
Divided into 3 groups	5.74	6.55	2.12	8.02	2.21	13.19
Divided into 4 groups	2.64	3.34	1.70	5.39	0.80	1.85
Divided 5 or more groups	2.23	0.35	0.67	2.26	7.79	3.04
% Missing	24.32	19.83	15.09	23.60	24.36	33.23
Valid N	8020	1509	1443	1083	1729	2187
Valid WTD N	2302427	775470	459173	347337	381078	267556
7TH GRADE COHORT						
Not Divided/Class Activity	68.56	69.11	70.35	66.91	64.37	75.37
Not Divided/Individual Instruction	5.23	4.67	5.42	6.65	4.68	1.78
Divided into 2 groups	2.10	0.43	2.49	0.34	6.82	2.43
Divided into 3 groups	3.20	1.88	3.64	2.10	5.15	9.49
Divided into 4 groups	4.83	2.96	2.79	6.67	9.68	5.79
Divided 5 or more groups	16.07	20.96	15.30	17.33	9.29	5.14
% Missing	33.23	30.07	28.55	28.22	35.25	59.36
Valid N	4844	1027	1009	1452	937	417
Valid WTD N	1966508	547954	576712	486429	261551	84267
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 4A.7
THE AVERAGE PERCENTAGE OF TIME SPENT BY STUDENTS IN INDIVIDUAL, SMALL GROUPS AND WHOLE CLASS INSTRUCTION IN MATH AS REPORTED BY THEIR TEACHERS BY POVERTY CONCENTRATION OF THE SCHOOL

GROUPING PRACTICES	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Individual Instruction	16.33	17.15	14.93	12.80	15.12	17.66
Small Group Instruction	38.66	33.84	35.12	43.06	44.29	41.12
Whole Class Instruction	45.09	49.01	49.95	44.51	40.70	41.21
% Missing	22.96	23.08	23.04	21.54	16.41	30.57
Valid N	8371	1342	1362	1135	2044	2423
Valid WTD N	2739148	648967	563385	346638	765810	331241
3RD GRADE COHORT						
Individual Instruction	17.61	18.04	15.68	19.11	17.47	19.49
Small Group Instruction	20.90	17.16	20.51	21.62	26.05	26.18
Whole Class Instruction	61.41	64.80	63.81	59.27	56.03	54.30
% Missing	25.42	20.50	17.36	23.51	27.09	33.55
Valid N	7845	1493	1378	1090	1658	2157
Valid WTD N	2269129	769076	446883	347763	367341	266254
7TH GRADE COHORT						
Individual Instruction	20.79	20.89	19.22	21.81	20.35	19.95
Small Group Instruction	17.69	13.97	16.48	21.90	20.77	18.04
Whole Class Instruction	61.52	65.15	64.40	56.30	58.64	62.00
% Missing	32.63	26.45	26.39	29.63	36.92	66.21
Valid N	4819	1114	972	1410	952	368
Valid WTD N	1984106	576317	594167	476853	254828	70055
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.8
THE AVERAGE PERCENTAGE OF TIME SPENT BY STUDENTS IN INDIVIDUAL, SMALL GROUPS AND WHOLE CLASS INSTRUCTION IN ENGLISH/READING/LANGUAGE ARTS AS REPORTED BY THEIR TEACHERS BY POVERTY CONCENTRATION OF THE SCHOOL

GROUPING PRACTICES	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Individual Instruction	19.41	17.66	19.57	17.50	20.41	18.89
Small Group Instruction	20.15	13.84	13.25	14.92	28.72	26.13
Whole Class Instruction	60.44	68.50	67.18	67.57	50.87	54.98
% Missing	21.54	20.51	22.34	18.52	13.44	29.03
Valid N	8392	1366	1316	1154	2057	2453
Valid WTD N	2789584	670699	568528	359982	792967	338593
3RD GRADE COHORT						
Individual Instruction	19.94	18.86	18.68	20.40	22.94	20.65
Small Group Instruction	17.87	20.76	13.93	16.55	17.60	21.58
Whole Class Instruction	62.18	60.37	67.38	63.05	59.46	57.78
% Missing	26.73	23.54	18.98	27.89	28.46	32.13
Valid N	7777	1430	1347	1006	1667	2211
Valid WTD N	2229234	739608	438158	327832	360427	271940
7TH GRADE COHORT						
Individual Instruction	22.78	18.49	27.09	20.93	25.93	20.47
Small Group Instruction	15.25	16.21	12.36	16.30	14.14	22.25
Whole Class Instruction	61.97	65.30	60.55	62.77	59.94	57.28
% Missing	29.49	25.72	30.96	19.96	31.86	47.52
Valid N	5232	1121	1068	1505	1010	522
Valid WTD N	2076430	581990	557276	542401	275273	108797
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 4A.9
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT PARTICULAR BASIS FOR GROUPING PRACTICES BY POVERTY CONCENTRATION OF THE SCHOOL

PRIMARY BASIS FOR FORMING MATH INSTRUCTION	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Similar Math Ability	56.10	74.31	7.36	67.56	75.65	37.75
Diversity of Abilities	27.29	0	50.12	27.01	19.13	37.99
Same Language Other than English	0.72	0	0	0	0.78	1.82
Handicapping Condition	0.13	0	0	0	0	0.70
All Comp. Educated Students Together	0.71	0	0	5.44	0.47	0
Unit Topics or Subject Matter	0.08	0	0	0	0	0.40
No Basis/Random	11.90	25.69	41.02	0	3.97	6.55
Other Basis (Specify)	3.07	0	1.50	0	0	14.81
% Missing	7.00	1.67	6.30	5.94	9.51	4.74
Valid N	1873	112	237	197	574	753
Valid WTD N	563268	39776	95098	49864	271363	107167
3RD GRADE COHORT						
Similar Math Ability	73.43	87.67	83.32	84.32	21.83	62.38
Diversity of Abilities	13.65	2.03	11.52	1.88	52.47	21.44
Same Language Other than English	0.27	0	0	0	0	0.99
Handicapping Condition	0.23	0	0	0	0.62	0.33
All Comp. Educated Students Together	0.58	0	0	7.60	0	0
Unit Topics or Subject Matter	4.63	0.57	0	0	21.58	8.47
No Basis/Random	6.65	9.72	4.34	6.20	3.49	4.81
Other Basis (Specify)	0.56	0	0.83	0	0	1.57
% Missing	4.84	6.66	4.04	5.43	4.64	3.08
Valid N	1633	186	178	139	298	830
Valid WTD N	377434	149630	58305	28758	36511	102971

EXHIBIT 4A.9
(CONTINUED)

PRIMARY BASIS FOR FORMING MATH INSTRUCTION	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Similar Math Ability	15.02	6.59	18.79	20.59	10.20	34.01
Diversity of Abilities	55.96	67.32	43.14	51.84	77.26	11.82
Same Language Other than English	0.19	0	0	0	0.38	2.07
Handicapping Condition	0.58	0.58	1.23	0.47	0	0
All Comp. Educated Students Together	0.12	0	0	0.63	0	0
Unit Topics or Subject Matter	3.73	0	2.87	16.40	0	0
No Basis/Random	20.30	16.70	30.92	10.08	12.17	52.11
Other Basis (Specify)	4.09	8.81	3.05	0	0	0
% Missing	4.64	1.44	5.80	8.04	4.33	2.08
Valid N	981	296	79	233	245	126
Valid WTD N	391978	152702	84406	74479	49496	27735
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.10

THE AVERAGE PERCENTAGE OF TIME SPENT BY STUDENTS IN INDIVIDUAL, SMALL GROUPS AND WHOLE CLASS INSTRUCTION IN ENGLISH/READING/LANGUAGE ARTS AS REPORTED BY THEIR TEACHERS BY POVERTY CONCENTRATION OF THE SCHOOL

BASIS ON WHICH INSTRUCTIONAL GROUPS ARE FORMED	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT						
Similar Reading/English/Language Arts Ability	82.01	79.85	78.23	82.55	84.62	79.67
Diversity of Abilities	14.28	13.96	15.61	17.45	11.90	17.78
Same Language other than English	0.50	0	0	0	1.12	0.79
Handicapping Condition	0.02	0	0.16	0	0	0
Compensatory Education Students are Grouped Together	0.06	0	0	0	0	0.41
Unit Topics or Subject Matter	0.11	0	0	0	0.31	0
No Basis/Random	2.27	6.19	3.54	0	1.49	0.18
Other Basis	0.74	0	2.46	0	0.56	1.16
% Missing	53.15	61.88	65.02	46.21	37.81	48.45
Valid N	5119	624	706	758	1391	1613
Valid WTD N	1665614	321643	256090	237655	569782	245922
3RD GRADE COHORT						
Similar Reading/English/Language Arts Ability	71.20	77.48	76.68	71.97	60.37	68.31
Diversity of Abilities	11.52	10.85	11.47	3.92	26.24	7.58
Same Language other than English	0.80	0	0	0	1.49	2.33
Handicapping Condition	0.61	0	0.66	0	0.78	1.45
Compensatory Education Students are Grouped Together	0.07	0	0	0	0.27	0.09
Unit Topics or Subject Matter	4.47	7.08	3.61	2.13	1.70	5.85
No Basis/Random	6.88	4.59	6.76	21.99	2.96	0.24
Other Basis	4.44	0	0.82	0	6.19	14.15
% Missing	83.51	85.37	89.06	78.83	82.48	71.21
Valid N	2193	195	243	311	472	970
Valid WTD N	501819	141518	59165	96258	88262	115357

EXHIBIT 4A.11
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT THE USE OF SPECIFIC TUTORS BY POVERTY CONCENTRATION OF THE SCHOOL

TUTORING	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Tutoring by Certified Teachers	46.25	44.25	37.73	42.08	50.81	53.13
Tutoring by Paraprofessionals	28.76	19.61	21.50	17.27	36.85	37.53
Tutoring by Volunteers or Parents	27.63	31.90	32.57	20.21	29.46	15.76
Tutoring by Older Students	15.37	10.54	23.71	6.58	17.99	15.28
Tutoring by Same Age Students	54.44	41.19	63.29	43.82	63.95	58.03
None of the Above Tutoring	22.76	24.13	17.21	36.19	21.32	25.47
% Missing	19.43	20.98	17.05	17.15	15.86	26.15
Valid N	8692	1387	1393	1185	2035	2584
Valid WTD N	2864513	666723	607227	366049	770869	352313
3RD GRADE COHORT						
Tutoring by Certified Teachers	46.91	46.40	54.47	43.51	52.55	47.28
Tutoring by Paraprofessionals	24.69	15.54	33.97	14.81	32.48	29.48
Tutoring by Volunteers or Parents	18.39	21.22	26.90	20.04	11.38	9.74
Tutoring by Older Students	9.27	10.42	10.86	8.66	10.90	4.94
Tutoring by Same Age Students	56.65	45.77	68.42	53.20	68.05	59.74
None of the Above Tutoring	23.24	29.01	11.13	24.52	17.48	23.81
% Missing	23.01	18.05	14.61	25.15	25.35	30.03
Valid N	8085	1523	1394	1067	1693	2292
Valid WTD N	2342521	792769	461765	340291	376080	280347
7TH GRADE COHORT						
Tutoring by Certified Teachers	46.74	41.25	46.29	48.75	57.03	44.14
Tutoring by Paraprofessionals	23.33	16.66	33.19	24.38	13.00	21.51
Tutoring by Volunteers or Parents	13.82	12.05	11.20	17.41	17.47	6.65
Tutoring by Older Students	18.50	8.14	20.18	27.15	15.29	22.78
Tutoring by Same Age Students	54.96	45.85	57.93	57.15	56.81	64.73
None of the Above Tutoring	24.61	36.35	19.85	22.69	15.70	25.87
% Missing	24.91	25.78	17.11	17.35	31.73	44.92
Valid N	5442	1134	1166	1565	1013	559
Valid WTD N	2211319	581539	669047	560073	275798	114205
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 4A.12

PERCENTAGE OF STUDENTS WHOSE READING/ENGLISH/LANGUAGE ARTS TEACHERS WHO REPORT THE USE OF SPECIFIC TUTORS BY POVERTY CONCENTRATION OF THE SCHOOL

TUTORING STRATEGIES	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Reading Recovery	8.11	2.62	7.17	3.27	15.81	10.62
Tutoring by Certified Teachers	36.71	41.69	18.84	30.12	41.40	39.59
Tutoring by Paraprofessionals	27.41	19.53	18.90	11.11	39.04	30.75
Tutoring by Volunteers or Parents	32.10	30.87	36.46	23.15	36.96	15.69
One-to-One Tutoring by Older Student	18.47	11.81	21.53	13.07	24.20	21.60
One-to-One Tutoring by Same Age Student	0	0	0	0	0	0
Non of the Above 1 to 1 Tutor Method	0	0	0	0	0	0
% Missing	17.68	18.98	15.04	14.54	13.62	26.45
Valid N	8761	1402	1438	1234	2029	2550
Valid WTD N	2926760	683620	621964	377581	791358	350905
3RD GRADE COHORT						
Reading Recovery	1.19	0.77	2.81	0.07	0.43	2.32
Tutoring by Certified Teachers	35.97	33.11	36.83	28.35	56.53	33.51
Tutoring by Paraprofessionals	16.56	6.70	16.27	15.56	26.50	29.55
Tutoring by Volunteers or Parents	15.77	13.03	21.75	23.73	11.63	12.53
One-to-One Tutoring by Older Student	8.60	7.43	10.42	7.31	12.08	7.85
One-to-One Tutoring by Same Age Student	0	0	0	0	0	0
Non of the Above 1 to 1 Tutor Method	0	0	0	0	0	0
% Missing	24.36	20.41	12.87	23.07	27.04	31.35
Valid N	7982	1449	1434	1100	1675	2230
Valid WTD N	2301430	769945	471196	349756	367556	275093
7TH GRADE COHORT						
Reading Recovery	0.94	2.68	0.32	0	0.34	0
Tutoring by Certified Teachers	51.02	69.17	43.32	37.50	57.34	35.30
Tutoring by Paraprofessionals	18.41	27.49	21.57	7.27	10.35	14.38
Tutoring by Volunteers or Parents	12.86	19.16	4.08	21.95	5.84	7.78
One-to-One Tutoring by Older Student	6.34	4.72	6.74	9.25	3.26	1.67
One-to-One Tutoring by Same Age Student	0	0	0	0	0	0
Non of the Above 1 to 1 Tutor Method	0	0	0	0	0	0
% Missing	31.10	22.95	21.58	34.12	36.98	59.01
Valid N	4901	1151	1035	1361	921	431
Valid WTD N	2029238	603756	632936	446454	254592	84992
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.10
(CONTINUED)

BASIS ON WHICH INSTRUCTIONAL GROUPS ARE FORMED	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
7TH GRADE COHORT						
Similar Reading/English/Language Arts Ability	9.33	2.10	4.73	6.17	27.06	30.36
Diversity of Abilities	50.14	68.89	31.41	50.67	53.04	42.26
Same Language other than English	0.23	0	0	0	1.73	0
Handicapping Condition	0.90	1.34	1.05	0	0	5.96
Compensatory Education Students are Grouped Together	0.14	0	0	0	1.04	0
Unit Topics or Subject Matter	14.28	0	23.73	22.72	13.22	5.99
No Basis/Random	21.08	25.18	28.01	20.08	3.58	14.03
Other Basis	3.91	2.48	11.06	0.37	0.32	1.40
% Missing	83.20	81.76	83.39	81.12	83.89	90.67
Valid N	1241	282	208	352	272	125
Valid WTD N	494847	142936	134104	127975	65074	19344
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.13
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT FREQUENT OR NO USE OF INDICATED INSTRUCTIONAL MATERIALS BY POVERTY CONCENTRATION OF THE SCHOOL

RESOURCES & MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Use of Textbook(s)						
Frequent	64.14	73.84	75.11	56.70	50.44	73.46
Never	11.79	14.46	4.23	18.45	7.09	9.83
% Missing	23.63	22.10	21.72	18.01	20.06	28.33
Valid N	8389	1362	1327	1144	2026	2492
Valid WTD N	2715407	657246	573023	362249	732380	341923
Use of Math Kits						
Frequent	28.46	28.02	24.62	26.30	26.66	38.45
Never	21.00	18.60	22.58	24.93	24.36	14.71
% Missing	26.00	23.81	27.32	18.04	22.29	30.10
Valid N	8175	1320	1285	1142	1966	2424
Valid WTD N	2631015	642881	532029	362127	711905	333487
Use of Computers						
Frequent	15.74	11.14	4.80	18.06	30.44	13.31
Never	22.14	7.62	26.54	28.25	20.68	45.58
% Missing	22.62	20.59	21.72	17.27	20.96	29.68
Valid N	8275	1346	1327	1139	1978	2420
Valid WTD N	2751250	670044	573023	365522	724083	335471
Use of Worksheets						
Frequent	43.11	46.16	44.57	49.20	31.30	57.43
Never	1.54	2.12	1.22	1.41	1.35	1.90
% Missing	22.23	21.95	21.91	16.49	18.75	29.03
Valid N	8352	1349	1308	1160	1995	2475
Valid WTD N	2765180	658541	571648	368960	744330	338594
Use of Manipulatives						
Frequent	80.06	77.45	81.98	79.76	81.53	74.31
Never	--	--	--	--	--	--
% Missing	21.33	19.64	22.34	15.47	17.99	28.15
Valid N	8521	1385	1316	1212	2056	2487
Valid WTD N	2797228	678052	568528	373471	751295	342775
Use of Teacher-Made Materials						
Frequent	49.34	51.11	40.09	57.77	54.24	46.93
Never	0.75	1.35	0	1.44	0	1.80
% Missing	22.71	19.64	22.01	17.09	22.21	29.37
Valid N	8319	1385	1302	1138	1978	2451
Valid WTD N	2747948	678052	570931	366291	712626	336941

EXHIBIT 4A.13
(CONTINUED)

RESOURCES & MATERIALS	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
Use of Chalkboard						
Frequent	73.40	79.81	79.13	73.67	65.68	78.38
Never	0.43	1.35	0	0.50	0	0.28
% Missing	21.05	19.64	21.61	15.47	17.99	27.23
Valid N	8602	1385	1337	1212	2056	2547
Valid WTD N	2806936	678052	573852	373471	751295	347160
Use of Math Games						
Frequent	51.49	56.52	46.93	54.88	54.79	36.75
Never	0.40	0	0	0.65	0.75	0.89
% Missing	21.47	19.64	22.22	16.94	18.31	27.41
Valid N	8517	1385	1320	1185	2033	2529
Valid WTD N	2792307	678052	569423	366991	748415	346320
Use of Audiovisuals/Videos						
Frequent	7.47	7.64	1.53	7.23	10.74	12.29
Never	39.06	28.51	47.56	34.91	40.01	39.00
% Missing	23.97	24.67	21.72	19.79	21.53	29.12
Valid N	8219	1303	1327	1088	1992	2444
Valid WTD N	2703149	635610	573023	354363	718904	338142
Use of Calculators						
Frequent	4.84	12.61	0	1.50	3.62	4.91
Never	57.02	37.63	72.42	69.31	52.50	66.52
% Missing	22.67	20.60	22.51	21.15	18.93	29.14
Valid N	8234	1339	1292	1078	2013	2447
Valid WTD N	2749484	669965	567291	348395	742664	338061
3RD GRADE COHORT						
Use of Textbook(s)						
Frequent	87.52	87.87	91.40	87.14	79.12	88.69
Never	1.91	4.41	0.13	0.54	1.63	0.26
% Missing	25.37	19.25	16.85	26.97	27.64	32.27
Valid N	7923	1482	1407	1043	1708	2214
Valid WTD N	2270502	781112	449641	332034	364535	271368
Use of Math Kits						
Frequent	13.85	14.52	9.81	9.17	18.35	22.07
Never	23.53	24.19	19.70	33.79	16.20	15.52
% Missing	27.22	19.73	22.17	32.50	29.21	34.53
Valid N	7635	1465	1314	974	1660	2106
Valid WTD N	2214472	776460	420914	306892	356618	262317
Use of Computers						
Frequent	15.73	12.33	6.26	21.20	24.64	18.65
Never	23.88	23.81	18.10	26.89	20.18	35.94
% Missing	26.21	20.89	17.53	28.68	29.73	34.07
Valid N	7729	1462	1370	1015	1633	2133
Valid WTD N	2244966	765214	445987	324265	354038	264192

EXHIBIT 4A.13
(CONTINUED)

RESOURCES & MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
Use of Worksheets						
Frequent	53.45	62.92	57.30	53.24	30.71	60.14
Never	2.47	2.14	1.14	4.55	3.98	1.82
% Missing	25.16	19.75	17.78	25.85	29.14	32.46
Valid N	7879	1481	1392	1043	1664	2183
Valid WTD N	2276878	776290	444635	337094	356975	270613
Use of Manipulatives						
Frequent	32.92	39.77	27.26	28.12	31.59	40.72
Never	1.86	1.97	1.59	2.13	2.72	1.12
% Missing	24.90	19.25	18.40	25.83	28.12	32.14
Valid N	7949	1482	1390	1044	1688	2229
Valid WTD N	2284871	781112	441283	337190	362117	271899
Use of Teacher-Made Materials						
Frequent	32.21	33.76	32.57	31.51	31.33	39.69
Never	1.79	1.90	1.05	0.38	0.80	6.37
% Missing	25.60	20.89	16.85	25.85	30.47	32.56
Valid N	7913	1462	1407	1043	1682	2203
Valid WTD N	2263730	765214	449641	337094	350277	270235
Use of Chalkboard						
Frequent	87.10	91.18	85.84	88.82	72.65	90.30
Never	1.02	2.13	1.48	0	0	0
% Missing	24.72	19.25	16.85	26.67	28.21	31.58
Valid N	7958	1482	1407	1033	1689	2232
Valid WTD N	2290314	781112	449641	333367	361699	274167
Use of Math Games						
Frequent	30.83	33.80	29.70	33.06	31.78	30.39
Never	1.95	1.24	0	7.33	1.16	1.89
% Missing	25.41	21.29	16.85	25.83	28.21	32.82
Valid N	7918	1459	1407	1044	1689	2204
Valid WTD N	2269384	761348	449641	337190	361699	269178
Use of Audiovisuals/Videos						
Frequent	5.59	5.16	2.96	10.00	5.74	7.50
Never	31.57	34.28	28.56	34.28	26.94	33.72
% Missing	26.11	20.99	17.96	27.32	28.73	35.29
Valid N	7732	1461	1369	1016	1655	2115
Valid WTD N	2248027	764331	443655	330442	359059	259270
Use of Calculators						
Frequent	8.02	8.15	3.88	5.52	16.04	9.56
Never	28.64	14.33	40.45	31.08	25.15	28.74
% Missing	24.70	19.25	17.29	25.83	28.15	32.10
Valid N	7947	1482	1406	1044	1686	2213
Valid WTD N	2290950	781112	447308	337190	362004	272066

EXHIBIT 4A.13
(CONTINUED)

RESOURCES & MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Use of Textbook(s)						
Frequent	89.74	93.45	90.01	88.16	89.56	79.77
Never	0.39	0.48	0.27	0.31	0.82	0
% Missing	27.33	29.49	22.95	16.70	30.89	47.42
Valid N	5321	1009	1118	1598	1027	562
Valid WTD N	2140043	552464	621928	564465	279188	109015
Use of Math Kits						
Frequent	2.78	0.16	0.22	3.10	3.28	27.76
Never	52.21	56.98	58.24	51.67	39.34	33.87
% Missing	28.64	28.94	23.30	20.47	34.74	46.83
Valid N	5147	1012	1112	1517	969	530
Valid WTD N	2101658	556784	619066	538972	263615	110237
Use of Computers						
Frequent	3.36	4.00	0.70	5.48	0.93	10.16
Never	61.57	52.80	56.03	70.21	73.23	71.20
% Missing	28.04	29.07	24.16	18.81	33.52	42.35
Valid N	5199	1013	1084	1538	978	579
Valid WTD N	2119134	555776	612132	550163	268555	119525
Use of Worksheets						
Frequent	38.81	20.45	42.76	51.20	25.45	73.68
Never	2.95	2.12	0.83	1.49	13.86	0
% Missing	27.67	28.86	22.95	19.25	32.81	42.50
Valid N	5247	1014	1118	1535	995	578
Valid WTD N	2130149	557383	621928	547202	271431	119221
Use of Manipulatives						
Frequent	10.48	11.21	10.94	5.76	7.52	32.25
Never	11.67	6.57	19.60	7.01	13.76	7.37
% Missing	28.04	29.09	24.46	18.55	32.56	43.80
Valid N	5223	1011	1085	1549	1002	570
Valid WTD N	2119233	555609	609748	551966	272450	116511
Use of Teacher-Made Materials						
Frequent	37.67	36.43	34.96	37.20	29.93	76.83
Never	5.93	4.80	9.33	7.00	0	4.50
% Missing	29.98	28.86	30.39	20.18	33.06	42.80
Valid N	5150	1014	1020	1537	996	576
Valid WTD N	2062121	557383	561841	540934	270395	118584
Use of Chalkboard						
Frequent	80.84	71.14	88.58	76.44	88.38	92.44
Never	0.76	1.20	0.06	0.52	2.25	0
% Missing	27.76	29.60	23.95	17.94	32.14	42.67
Valid N	.5253	1012	1089	1565	1008	572
Valid WTD N	2127567	551619	613865	556104	274142	118853

EXHIBIT 4A.13
(CONTINUED)

RESOURCES & MATERIALS	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
Use of Math Games						
Frequent	10.22	7.30	8.56	12.34	8.57	28.51
Never	15.80	21.00	13.24	10.48	24.82	10.96
% Missing	27.88	29.21	23.28	17.62	33.73	46.39
Valid N	5232	1009	1113	1570	981	552
Valid WTD N	2124010	554692	619246	558229	267706	111152
Use of Audiovisuals/Videos						
Frequent	8.87	5.98	7.73	6.59	19.67	15.56
Never	34.76	28.81	33.71	41.31	40.39	28.86
% Missing	28.74	29.83	23.86	20.25	34.89	42.72
Valid N	5159	1000	1096	1516	963	578
Valid WTD N	2098626	549781	614542	540424	263012	118762
Use of Calculators						
Frequent	47.32	58.32	48.81	44.45	34.10	31.79
Never	8.96	6.63	9.14	6.53	15.78	15.70
% Missing	27.61	29.57	23.17	17.67	33.17	42.65
Valid N	5269	1004	1116	1577	992	573
Valid WTD N	2131808	551848	620170	557933	269967	118907
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.14

PERCENTAGE OF STUDENTS WHOSE READING/ENGLISH/LANGUAGE ARTS TEACHERS REPORT FREQUENT OR NO USE OF INDICATED INSTRUCTIONAL MATERIALS BY POVERTY CONCENTRATION OF THE SCHOOL

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Textbooks						
Frequent Use	63.54	46.09	78.40	65.29	68.48	74.06
Never Used	12.98	18.97	9.83	8.58	8.10	8.07
% Missing	21.04	20.73	15.51	18.78	17.84	31.82
Valid N	8352	1364	1392	1159	2025	2347
Valid WTD N	2807313	668868	618540	358850	752698	325250
Literature and/or Trade Books						
Frequent Use	64.57	74.07	74.41	54.46	53.50	53.97
Never Used	3.03	0	4.10	2.60	2.00	10.99
% Missing	20.85	19.79	15.82	19.70	17.20	31.92
Valid N	8347	1384	1410	1168	1993	2327
Valid WTD N	2814219	676759	616268	354786	758526	324773
Basal Reader						
Frequent Use	69.25	60.05	84.38	75.89	64.99	80.27
Never Used	7.68	12.89	4.16	1.82	5.41	6.65
% Missing	21.24	20.53	15.33	19.70	16.90	34.88
Valid N	8367	1362	1410	1168	2032	2330
Valid WTD N	2800257	670551	619843	354786	761287	310684
Children's Newspaper and/or Magazines						
Frequent Use	12.38	9.99	14.83	11.48	12.62	16.53
Never Used	14.81	6.83	15.39	13.96	23.26	15.46
% Missing	22.34	21.21	15.71	20.48	18.80	36.89
Valid N	8129	1358	1399	1107	1939	2261
Valid WTD N	2761287	664810	617042	351316	743914	301097
Adult Newspaper and/or Magazines						
Frequent Use	2.42	0	5.74	0	2.67	4.15
Never Used	34.36	18.82	36.51	39.61	35.02	37.31
% Missing	24.47	24.38	22.06	20.48	19.91	35.32
Valid N	7919	1306	1337	1094	1899	2218
Valid WTD N	2685317	638008	570575	351316	733753	308558
Language Experience Stories						
Frequent Use	53.20	58.12	49.46	55.18	49.21	52.76
Never Used	0.84	0	0.27	1.37	0.14	4.91
% Missing	20.24	20.15	15.14	16.91	16.91	30.92
Valid N	8467	1379	1429	1191	2031	2372
Valid WTD N	2835960	673754	621218	367120	761175	329585

EXHIBIT 4A.14
(CONTINUED)

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
	•	0-19%	20-34%	35-49%	50-74%	75-100%
Reading/English/Language Arts Kits						
Frequent Use	9.58	9.74	4.79	12.60	5.97	17.76
Never Used	48.35	34.91	58.11	45.38	55.75	44.92
% Missing	25.75	27.53	21.94	21.58	21.82	34.77
Valid N	7940	1265	1356	1104	1914	2236
Valid WTD N	2639801	611424	571408	346484	716204	311173
Computers with R/E/LA Instructional Software						
Frequent Use	16.75	21.91	11.61	13.18	17.82	21.61
Never Used	27.07	15.29	32.28	32.40	24.95	46.54
% Missing	24.24	25.99	22.33	19.61	19.44	32.07
Valid N	8097	1271	1345	1113	1968	2335
Valid WTD N	2693517	624438	568608	355200	738072	324092
Controlled Vocabulary Materials						
Frequent Use	13.98	9.72	6.34	17.55	12.25	21.50
Never Used	34.59	19.87	60.33	28.81	37.50	27.54
% Missing	25.30	23.46	22.88	18.93	23.31	36.77
Valid N	7877	1294	1329	1125	1909	2155
Valid WTD N	2655900	645824	564586	358185	702545	301653
Other R/E/LA Instructional Material						
Frequent Use	28.18	28.62	37.87	25.65	30.12	10.48
Never Used	63.07	67.30	58.73	72.24	49.02	77.11
% Missing	72.46	69.00	69.33	71.10	75.00	71.38
Valid N	3036	537	532	357	699	911
Valid WTD N	979350	261547	224529	127691	229028	136555

EXHIBIT 4A.14
(CONTINUED)

ENGLISH TEACHERS	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
3RD GRADE COHORT						
Textbooks						
Frequent Use	62.94	56.51	56.17	64.23	61.97	82.63
Never Used	9.00	10.08	15.65	7.04	7.03	2.05
% Missing	24.84	20.87	13.18	26.95	25.95	31.44
Valid N	7986	1501	1441	1052	1693	2230
Valid WTD N	2286655	765426	469485	332129	373073	274731
Literature and/or Trade Books						
Frequent Use	56.41	62.79	51.07	67.47	60.64	41.53
Never Used	1.47	0.54	1.13	2.41	1.69	3.63
% Missing	23.95	18.67	13.99	22.93	26.58	32.62
Valid N	7992	1523	1436	1094	1676	2194
Valid WTD N	2313902	786721	465131	350370	369887	269980
Basal Reader						
Frequent Use	57.32	51.63	61.61	46.41	55.40	71.13
Never Used	10.47	15.00	9.35	4.13	9.57	11.78
% Missing	25.93	22.44	15.41	24.87	27.10	33.77
Valid N	7784	1470	1414	1044	1616	2171
Valid WTD N	2253702	750265	457451	341570	367247	265358
Children's Newspaper and/or Magazines						
Frequent Use	12.26	11.29	9.19	15.55	15.42	15.10
Never Used	17.03	15.81	23.22	16.18	19.79	12.17
% Missing	25.71	19.70	17.49	25.32	28.54	33.63
Valid N	7747	1511	1372	1056	1589	2150
Valid WTD N	2260208	776735	446204	339522	360002	265934
Adult Newspaper and/or Magazines						
Frequent Use	5.15	6.97	3.12	3.15	7.03	4.51
Never Used	23.95	16.47	33.41	20.12	24.22	15.00
% Missing	26.26	19.46	19.68	26.08	28.50	34.65
Valid N	7631	1498	1349	1035	1561	2119
Valid WTD N	2243438	779123	434378	336046	360216	261863
Language Experience Stories						
Frequent Use	22.10	27.57	14.22	17.85	24.08	28.28
Never Used	15.37	10.68	28.03	15.94	17.46	7.77
% Missing	25.02	20.68	16.62	22.93	26.70	31.96
Valid N	7952	1505	1405	1094	1674	2206
Valid WTD N	2281403	767304	450906	350370	369304	272649

EXHIBIT 4A.14
(CONTINUED)

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
Reading/English/Language Arts Kits						
Frequent Use	5.74	4.71	8.40	1.87	6.23	10.35
Never Used	49.65	42.67	54.88	56.75	52.11	35.96
% Missing	26.94	21.08	20.93	24.65	29.70	34.35
Valid N	7591	1485	1326	1056	1550	2105
Valid WTD N	2222697	763468	427612	342554	354185	263067
Computers with R/E/LA Instructional Software						
Frequent Use	9.19	2.87	11.40	10.64	12.35	19.94
Never Used	35.03	43.68	27.05	42.44	28.98	31.58
% Missing	25.92	19.52	18.76	27.76	26.24	34.01
Valid N	7796	1502	1374	1056	1672	2123
Valid WTD N	2254029	778479	439327	328433	371581	264396
Controlled Vocabulary Materials						
Frequent Use	8.55	4.36	13.85	5.49	10.32	15.78
Never Used	49.62	51.12	50.31	49.40	46.13	35.56
% Missing	27.59	22.36	21.29	26.11	29.22	34.57
Valid N	7582	1448	1342	1030	1593	2100
Valid WTD N	2203126	751009	425644	335919	356565	262176
Other R/E/LA Instructional Material						
Frequent Use	16.91	20.55	14.56	19.02	16.28	12.03
Never Used	71.20	62.81	68.82	72.30	78.17	85.33
% Missing	66.84	60.81	64.20	61.12	74.80	78.71
Valid N	3103	764	541	537	578	638
Valid WTD N	1008997	379145	193574	176764	126978	85313

EXHIBIT 4A.14
(CONTINUED)

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Textbooks						
Frequent Use	62.94	69.60	51.09	56.18	82.22	75.26
Never Used	7.48	3.88	15.42	5.70	2.96	2.04
% Missing	31.37	25.99	26.39	29.49	33.67	56.91
Valid N	4984	1117	1030	1431	965	438
Valid WTD N	2021044	579894	594166	477819	267936	89344
Literature and/or Trade Books						
Frequent Use	54.69	50.29	56.16	59.16	56.20	48.26
Never Used	2.59	1.00	3.71	2.14	5.46	0
% Missing	33.04	27.22	30.50	28.18	36.12	59.45
Valid N	4932	1102	996	1453	954	424
Valid WTD N	1971984	570253	560995	486718	258064	84068
Basal Reader						
Frequent Use	11.50	5.36	7.40	10.38	20.31	64.80
Never Used	72.92	81.73	78.16	66.31	67.49	29.26
% Missing	36.17	30.54	28.77	36.48	40.73	61.96
Valid N	4608	1076	986	1273	874	396
Valid WTD N	1879796	544227	574952	430435	239420	78876
Children's Newspaper and/or Magazines						
Frequent Use	8.01	6.25	2.89	11.24	11.47	33.05
Never Used	46.82	48.41	59.32	34.24	47.11	10.88
% Missing	36.07	29.01	29.08	33.89	44.78	65.76
Valid N	4598	1067	984	1339	828	377
Valid WTD N	1882620	556226	572462	447988	223063	70994
Adult Newspaper and/or Magazines						
Frequent Use	11.40	5.01	7.76	17.99	15.26	34.14
Never Used	18.03	18.52	25.23	14.65	9.19	12.04
% Missing	34.79	27.75	29.97	32.25	41.69	60.18
Valid N	4746	1093	979	1386	874	411
Valid WTD N	1920398	566078	565231	459089	235561	82553
Language Experience Stories						
Frequent Use	12.96	7.22	10.39	17.44	15.52	38.96
Never Used	31.41	39.29	36.46	29.11	14.38	10.81
% Missing	35.56	28.75	32.29	31.94	40.76	61.17
Valid N	4631	1078	949	1315	884	402
Valid WTD N	1897768	558293	546541	461238	239303	80508

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EXHIBIT 4A.14
(CONTINUED)

ENGLISH TEACHERS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
Reading/English/Language Arts Kits						
Frequent Use	3.98	4.15	2.79	2.21	8.74	6.35
Never Used	74.16	74.11	82.15	74.51	63.46	60.86
% Missing	36.37	27.46	32.12	37.21	39.16	64.06
Valid N	4673	1112	977	1286	906	389
Valid WTD N	1873935	568381	547890	425484	245782	74511
Computers with R/E/LA Instructional Software						
Frequent Use	3.11	1.85	1.22	5.12	5.50	3.59
Never Used	62.36	51.15	65.94	76.16	58.11	63.67
% Missing	37.48	29.44	32.23	37.13	42.59	65.48
Valid N	4543	1071	959	1289	856	365
Valid WTD N	1841211	552843	546975	426019	231910	71577
Controlled Vocabulary Materials						
Frequent Use	15.77	20.51	6.98	10.87	26.07	36.00
Never Used	41.24	32.51	50.21	46.37	32.49	46.55
% Missing	35.92	28.75	32.22	35.24	37.34	62.37
Valid N	4657	1078	956	1314	908	398
Valid WTD N	1887272	558293	547120	438838	253124	78011
Other R/E/LA Instructional Material						
Frequent Use	33.89	35.15	42.92	24.84	9.06	45.27
Never Used	47.94	53.33	36.38	47.75	81.01	36.29
% Missing	75.54	70.70	68.68	77.90	84.80	87.08
Valid N	1743	421	419	511	252	140
Valid WTD N	720300	229579	252776	149738	61416	26792
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.15
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT THAT COMPUTERS ARE NEVER OR ARE FREQUENTLY USED BY POVERTY CONCENTRATION OF SCHOOL

WHICH DESCRIBES YOUR INSTRUCTIONAL USE OF COMPUTERS	TOTAL	POVERTY				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Computers are not used	16.23	5.82	16.55	19.28	19.40	30.57
Computers used nearly every day	23.11	7.79	15.88	21.86	37.16	31.21
% Missing	16.58	17.47	17.22	11.52	9.24	28.74
Valid N	8847	1429	1436	1261	2124	2489
Valid WTD N	2966069	696320	605991	390933	831516	339976
3RD GRADE COHORT						
Computers are not used	13.42	7.26	12.39	20.06	13.83	20.87
Computers used nearly every day	21.99	18.85	28.11	19.98	23.73	27.36
% Missing	21.73	17.63	13.20	21.70	24.84	27.92
Valid N	8282	1530	1454	1129	1714	2338
Valid WTD N	2381430	796837	469423	355975	378650	288819
7TH GRADE COHORT						
Computers are not used	54.14	43.59	42.71	68.96	62.89	84.31
Computers used nearly every day	3.50	3.95	3.51	3.67	3.38	0.59
% Missing	23.41	24.21	17.90	13.17	27.60	48.79
Valid N	5594	1163	1153	1641	1076	556
Valid WTD N	2255717	593878	662705	588436	292467	106163
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.16
PERCENTAGE OF STUDENTS WHOSE ENGLISH/READING/LANGUAGE ARTS TEACHERS REPORT THAT COMPUTERS ARE NEVER OR FREQUENTLY USED BY POVERTY CONCENTRATION OF SCHOOL

WHICH DESCRIBES YOUR INSTRUCTIONAL USE OF COMPUTERS	TOTAL	SCHOOL POVERTY CONCENTRATION				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Computers are not used	16.74	6.24	18.46	19.28	19.36	30.93
Computers used nearly every day	23.13	7.75	16.23	21.86	37.22	30.55
% Missing	16.78	17.77	17.49	11.52	9.24	29.30
Valid N	8818	1425	1437	1261	2124	2463
Valid WTD N	2958932	693821	604015	390933	831516	337314
3RD GRADE COHORT						
Computers are not used	16.16	12.68	12.07	20.77	17.46	23.39
Computers used nearly every day	20.22	17.26	26.58	16.56	23.99	23.47
% Missing	21.71	17.63	13.35	21.49	23.90	28.99
Valid N	8285	1527	1451	1134	1718	2338
Valid WTD N	2381908	796768	468565	356915	383409	284524
7TH GRADE COHORT						
Computers are not used	45.79	30.68	44.64	65.43	47.14	43.68
Computers used nearly every day	5.33	2.43	6.33	7.29	1.79	16.18
% Missing	27.38	25.67	19.72	25.51	28.93	49.65
Valid N	5274	1148	1074	1488	1053	507
Valid WTD N	2138708	582404	647961	504822	287089	104397
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 4A.17
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT SPECIFIC PURPOSES FOR COMPUTER USE BY POVERTY CONCENTRATION OF SCHOOL

HOW COMPUTERS ARE USED IN MATH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
For Student Mastery of Math	68.04	70.45	71.10	79.06	64.20	54.73
Reward for Completing Their Other Work	18.76	11.25	25.41	41.12	14.08	5.99
Understanding Concepts in Math	21.31	26.97	17.35	8.33	29.84	16.42
For Learning to Apply Mathematics	29.44	38.70	16.58	33.41	29.14	29.15
For Improving Students' Writing	24.15	23.79	17.40	16.47	29.67	37.40
Improving Reading Vocab/Comprehension	44.60	38.34	48.36	44.92	45.18	61.24
For Motivating Interest in Math	35.03	35.94	38.72	24.44	41.25	25.63
For Teaching About Computers	69.45	77.55	69.08	71.25	72.62	47.77
For Challenging the Brightest Students	12.82	10.62	12.19	13.66	12.55	15.23
For Remediating Deficiencies	13.89	2.42	11.64	22.25	19.43	30.28
Computers Used for None of the Above	2.55	0.25	3.98	0	5.84	1.11
% Missing	30.55	22.45	30.92	28.75	27.38	52.23
Valid N	7221	1289	1141	1026	1814	1843
Valid WTD N	2469353	654351	505712	314812	665255	227890
3RD GRADE COHORT						
For Student Mastery of Math	60.02	51.75	59.75	64.90	64.94	61.53
Reward for Completing Their Other Work	20.78	14.98	32.36	28.71	14.71	23.61
Understanding Concepts in Math	30.59	27.65	19.82	22.64	43.26	30.17
For Learning to Apply Mathematics	32.44	30.97	22.40	21.07	43.79	42.77
For Improving Students' Writing	25.15	32.20	11.93	26.21	29.59	26.71
Improving Reading Vocab/Comprehension	29.32	29.84	27.66	20.92	31.13	47.70
For Motivating Interest in Math	37.05	38.52	43.32	39.19	42.07	22.22
For Teaching About Computers	30.32	38.03	38.56	18.59	23.08	14.99
For Challenging the Brightest Students	13.93	11.84	12.41	24.56	17.55	9.41
For Remediating Deficiencies	23.11	15.79	27.51	33.23	21.47	35.12
Computers Used for None of the Above	0.95	1.68	0	2.41	0	0.22
% Missing	33.16	25.39	24.32	38.35	35.76	43.47
Valid N	6802	1369	1253	902	1445	1764
Valid WTD N	2033487	721700	409291	280274	323648	226502

EXHIBIT 4A.17
(CONTINUED)

HOW COMPUTERS ARE USED IN MATH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
For Student Mastery of Math	50.04	60.94	47.80	42.87	31.48	59.28
Reward for Completing Their Other Work	35.98	11.11	55.51	40.00	37.88	23.43
Understanding Concepts in Math	45.41	41.29	43.58	64.42	33.38	71.72
For Learning to Apply Mathematics	44.16	62.74	36.24	42.44	16.36	62.62
For Improving Students' Writing	8.28	7.62	4.94	18.17	4.62	5.02
Improving Reading Vocab/Comprehension	3.02	1.42	3.71	1.71	3.40	1.09
For Motivating Interest in Math	29.56	45.25	14.37	29.59	36.18	36.34
For Teaching About Computers	18.53	12.75	25.68	7.90	31.31	5.34
For Challenging the Brightest Students	5.18	2.91	0.97	19.71	2.68	6.78
For Remediating Deficiencies	29.34	34.32	25.79	20.70	38.08	29.86
Computers Used for None of the Above	6.75	6.46	4.31	1.30	27.09	0
% Missing	64.94	57.25	53.16	73.04	73.17	91.97
Valid N	2395	664	647	567	387	127
Valid WTD N	1032665	334992	378069	182678	108382	16657
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.18
PERCENTAGE OF STUDENTS WHOSE ENGLISH/READING/LANGUAGE ARTS TEACHERS REPORT SPECIFIC PURPOSES FOR COMPUTER USE BY POVERTY CONCENTRATION OF SCHOOL

HOW COMPUTERS ARE USED IN ENGLISH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
For Student Mastery of Language Arts	68.08	70.11	71.45	79.03	64.22	55.52
Reward for Completing Their Other Work	18.85	11.27	25.91	41.05	14.13	5.90
Understanding Concepts in Language Arts	21.50	26.74	18.20	8.34	29.82	17.00
For Learning to Apply Language Arts	29.36	38.01	16.50	33.46	29.14	29.90
For Improving Students' Writing	24.62	24.86	17.91	16.49	29.66	38.09
Improving Reading Vocab/Comprehension	44.36	38.20	48.52	44.98	45.15	58.96
For Motivating Interest in Language Arts	34.96	36.54	37.72	24.35	41.22	25.66
For Teaching About Computers	22.61	34.61	27.18	12.85	15.10	24.01
For Challenging the Brightest Students	13.11	11.10	12.89	13.67	12.54	15.43
For Remediating Deficiencies	13.74	2.44	11.21	22.28	19.48	29.11
Computers Used for None of the Above	2.52	0.25	3.77	0	5.83	1.13
% Missing	31.16	23.08	32.72	28.83	27.34	52.87
Valid N	7161	1278	1117	1025	1816	1817
Valid WTD N	2447755	648997	492535	314432	665634	224825
3RD GRADE COHORT						
For Student Mastery of Language Arts	60.91	55.45	52.48	70.99	64.36	63.44
Reward for Completing Their Other Work	19.79	12.47	30.30	29.93	15.41	22.54
Understanding Concepts in Language Arts	26.15	22.17	20.76	22.27	34.45	18.35
For Learning to Apply Language Arts	29.10	30.10	21.02	16.70	34.93	36.84
For Improving Students' Writing	27.38	31.31	18.11	35.01	26.82	32.56
Improving Reading Vocab/Comprehension	32.48	27.65	33.72	29.41	36.01	54.88
For Motivating Interest in Language Arts	37.24	43.20	46.60	31.59	34.82	23.12
For Teaching About Computers	28.69	39.54	31.11	18.19	15.97	20.71
For Challenging the Brightest Students	11.75	13.07	11.23	17.10	10.19	7.86

EXHIBIT 4A.18
(CONTINUED)

HOW COMPUTERS ARE USED IN ENGLISH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
For Remediating Deficiencies	22.29	13.67	28.01	31.38	19.51	37.70
Computers Used for None of the Above	0.99	1.79	0	2.43	0	0.23
% Missing	35.28	29.86	24.18	38.68	37.71	46.11
Valid N	6628	1328	1252	900	1382	1697
Valid WTD N	1969104	678474	410014	278782	313810	215951
7TH GRADE COHORT						
For Student Mastery of Language Arts	22.17	19.92	18.22	20.14	32.64	29.78
Reward for Completing Their Other Work	14.84	13.39	8.42	19.77	26.89	9.24
Understanding Concepts in Language Arts	0.88	1.01	0.77	1.27	0.71	0
For Learning to Apply Language Arts	3.24	3.11	0.58	2.50	2.92	27.08
For Improving Students' Writing	67.84	71.35	69.63	68.66	61.91	47.58
Improving Reading Vocab/Comprehension	33.40	38.88	18.28	25.20	57.28	50.04
For Motivating Interest in Language Arts	51.46	56.67	54.74	50.32	45.07	22.18
For Teaching About Computers	24.47	16.71	31.40	27.24	21.28	38.57
For Challenging the Brightest Students	16.14	15.40	15.29	17.23	24.32	3.53
For Remediating Deficiencies	25.45	21.11	17.77	25.76	58.51	7.47
Computers Used for None of the Above	13.05	10.21	25.96	6.10	0	10.87
% Missing	60.95	48.47	55.78	74.25	62.43	75.36
Valid N	2554	715	521	561	493	261
Valid WTD N	1149908	403725	356951	174501	151759	51086
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916.133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503.801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403.963	207,325

EXHIBIT 4A.19
PERCENTAGE OF STUDENTS WHOSE MATH TEACHERS REPORT USAGE OF SPECIFIC SOFTWARE BY POVERTY CONCENTRATION OF SCHOOL

COMPUTER SOFTWARE	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Integrated Computer - Assisted Instruction	6.19	1.73	1.61	7.89	11.13	12.09
IBM's Writing to Read Program	7.63	2.76	9.09	7.10	5.84	18.95
HOTS	0.04	0	0	0	0	0.31
Other Computer - Assisted Programs	31.55	47.38	25.20	15.21	36.54	13.54
None of the Above Educational Software	55.42	49.87	63.34	68.04	48.10	58.31
% Missing	22.35	23.02	20.79	16.33	19.95	31.42
Valid N	8374	1358	1376	1200	1921	2411
Valid WTD N	2760960	649500	579885	369670	733378	327195
3RD GRADE COHORT						
Integrated Computer - Assisted Instruction	9.52	1.83	7.55	9.03	15.69	28.76
IBM's Writing to Read Program	1.73	0.80	0.42	1.24	1.81	7.76
HOTS	0.17	0	0	0.08	0.37	0.81
Other Computer - Assisted Programs	23.00	20.54	24.35	25.46	27.97	22.99
None of the Above Educational Software	67.35	77.74	66.68	66.71	57.75	45.66
% Missing	26.64	24.58	15.71	23.78	25.23	36.25
Valid N	7796	1424	1413	1090	1658	2117
Valid WTD N	2231988	729596	455832	346539	376684	255453
7TH GRADE COHORT						
Integrated Computer - Assisted Instruction	3.59	0.83	2.62	4.99	3.14	24.81
IBM's Writing to Read Program	0.46	0.10	0	1.31	0.30	2.42
HOTS	0.55	0.57	0	1.64	0.03	0
Other Computer - Assisted Programs	17.58	26.89	13.32	9.84	22.57	8.87
None of the Above Educational Software	76.44	71.72	82.77	79.85	70.12	63.90
% Missing	33.23	23.91	27.37	34.59	38.18	60.36
Valid N	4762	1123	990	1347	899	400
Valid WTD N	1966475	596223	586266	443278	249720	82190
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 4A.20
PERCENTAGE OF STUDENTS WHOSE ENGLISH/READING/LANGUAGE ARTS TEACHERS REPORT USAGE OF SPECIFIC SOFTWARE BY POVERTY CONCENTRATION OF SCHOOL

COMPUTER SOFTWARE	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Integrated Computer - Assisted Instruction	9.13	6.52	2.28	8.02	15.43	15.81
HOTS	0.13	0	0	0.73	0	0.30
Assorted Individual Diskettes	36.80	36.94	35.83	26.35	47.35	21.86
None of the Above Educational Software	55.37	56.54	63.05	64.90	40.32	64.88
% Missing	19.13	18.86	17.97	17.60	14.50	28.44
Valid N	8547	1404	1372	1173	1987	2503
Valid WTD N	2875260	684622	600493	364075	783322	341417
3RD GRADE COHORT						
Integrated Computer - Assisted Instruction	10.60	4.16	14.53	8.46	13.65	24.09
HOTS	0.34	0.70	0	0	0.32	0.40
Assorted Individual Diskettes	34.64	32.43	40.19	41.65	40.86	25.64
None of the Above Educational Software	56.42	63.68	46.54	54.32	47.78	53.04
% Missing	23.63	18.60	13.11	27.96	25.38	32.34
Valid N	8016	1510	1447	1022	1681	2239
Valid WTD N	2323520	787407	469869	327496	375925	271095
7TH GRADE COHORT						
Integrated Computer - Assisted Instruction	4.04	6.13	1.93	2.75	8.42	1.43
HOTS	0.57	0.91	0	1.17	0	0.67
Assorted Individual Diskettes	18.07	23.99	24.09	12.46	6.95	5.63
None of the Above Educational Software	78.05	70.85	74.51	83.75	84.63	92.94
% Missing	25.42	25.09	18.31	19.10	31.21	45.39
Valid N	5323	1156	1069	1540	1013	540
Valid WTD N	2196288	586933	659349	548246	277881	113222
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 5A.1
PERCENTAGE OF STUDENTS WHO ATTEND SCHOOLS IN WHICH PARTICULAR COORDINATION STRATEGIES ARE USED FREQUENTLY OR NOT AT ALL, BY COHORT AND POVERTY CONCENTRATION OF THE SCHOOL AS REPORTED BY THE MATHEMATICS CHAPTER 1 TEACHER

CHAPTER 1 TEACHER MATHEMATICS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Consultation in Development of Written Lesson Plan						
Daily	14.70	0	7.28	25.25	5.48	27.49
Never	14.48	21.75	43.10	2.08	0.22	0
% Missing	97.28	99.26	96.18	94.27	97.81	96.45
Valid N	422	38	52	78	112	142
Valid WTD N	96541	6222	27982	25332	20059	16946
Meetings/Confer. Between Regular & Chapter 1 Staff						
Daily	8.76	0	7.28	25.25	0	0
Never	14.57	63.13	29.73	3.98	3.87	0
% Missing	97.29	99.26	96.18	94.27	97.81	96.50
Valid N	419	38	52	78	112	139
Valid WTD N	96287	6222	27982	25332	20059	16691
Regular & Chapter 1 Staff Have Informal Discussion						
Daily	39.18	29.15	28.36	41.80	32.09	51.61
Never						
% Missing	97.18	99.26	96.18	94.27	97.81	96.50
Valid N	422	38	52	78	112	139
Valid WTD N	100123	6222	27982	25332	20059	16691
Regular & Chapter 1 Staff Share Written Record						
Daily	11.69	14.03	7.28	25.25	0	14.37
Never	12.21	0	10.75	0	10.30	19.87
% Missing	97.18	99.26	96.18	94.27	97.81	96.50
Valid N	422	38	52	78	112	139
Valid WTD N	100123	6222	27982	25332	20059	16691
Common Planning Periods to Regular & Chap. 1 Staff						
Daily	27.23	0	21.08	25.25	37.35	43.80
Never	49.49	35.78	78.92	74.75	4.09	12.16
% Missing	97.16	99.26	96.18	94.27	97.81	96.29
Valid N	434	38	52	78	112	151
Valid WTD N	101140	6222	27982	25332	20059	17709

EXHIBIT 5A.1
(CONTINUED)

CHAPTER 1 TEACHER MATHEMATICS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Consultation in Development of Written Lesson Plan						
Daily	12.44	41.78	3.91	14.46	9.40	7.97
Never	17.57	4.25	20.57	45.19	2.73	11.20
% Missing	96.28	98.52	94.18	95.74	96.90	91.92
Valid N	603	45	88	88	92	290
Valid WTD N	113179	14349	31448	19371	15633	32378
Meetings/Confer. Between Regular & Chapter 1 Staff						
Daily	7.31	41.78	5.15	0	0	2.59
Never	13.63	3.60	17.38	27.96	6.39	8.27
% Missing	96.20	98.52	94.18	95.20	96.90	91.92
Valid N	611	45	88	96	92	290
Valid WTD N	115635	14349	31448	21827	15633	32378
Regular & Chapter 1 Staff Have Informal Discussion						
Daily	43.64	83.14	30.98	32.61	47.04	43.40
Never	3.05	0	0.84	16.15	0	0.19
% Missing	96.28	98.52	94.18	95.74	96.90	91.90
Valid N	604	45	88	88	92	291
Valid WTD N	113240	14349	31448	19371	15633	32439
Regular & Chapter 1 Staff Share Written Record						
Daily	8.34	41.78	8.55	0	0	2.98
Never	3.83	0	3.75	14.33	0.39	0.19
% Missing	96.20	98.52	94.18	95.20	96.90	91.90
Valid N	612	45	88	96	92	291
Valid WTD N	115697	14349	31448	21827	15633	32439
Common Planning Periods to Regular & Chap. 1 Staff						
Daily	19.29	41.78	2.64	12.83	18.34	30.32
Never	53.44	48.71	57.95	74.77	60.25	33.27
% Missing	96.16	98.52	94.18	95.20	96.66	91.90
Valid N	620	45	88	96	100	291
Valid WTD N	116913	14349	31448	21827	16849	32439

EXHIBIT 5A.1
(CONTINUED)

CHAPTER 1 TEACHER MATHEMATICS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
7TH GRADE COHORT						
Consultation in Development of Written Lesson Plan						
Daily	10.23	0	0	16.67	0	43.32
Never	38.27	100.00	22.09	13.07	82.08	33.15
% Missing	98.39	99.27	99.17	96.38	97.86	99.14
Valid N	145	10	14	74	16	28
Valid WTD N	47524	5735	6679	24529	8636	1783
Meetings/Confer. Between Regular & Chapter 1 Staff						
Daily	15.84	0	0	30.22	0	0
Never	25.84	0	22.09	13.07	82.08	21.93
% Missing	98.41	99.27	99.17	96.38	97.86	99.50
Valid N	138	10	14	74	16	21
Valid WTD N	46787	5735	6679	24529	8636	1046
Regular & Chapter 1 Staff Have Informal Discussion						
Daily	39.43	7.78	100.00	44.46	0	36.68
Never	15.67	0	0	0	82.08	21.93
% Missing	98.41	99.27	99.17	96.38	97.86	99.50
Valid N	137	10	14	74	16	21
Valid WTD N	46697	5735	6679	24529	8636	1046
Regular & Chapter 1 Staff Share Written Record						
Daily	0.19	0	0	0	0	0
Never	15.65	0	0	0	82.08	22.70
% Missing	98.41	99.27	99.17	96.38	97.86	99.51
Valid N	137	10	14	74	16	20
Valid WTD N	46752	5735	6679	24529	8636	1011
Common Planning Periods to Regular & Chap. 1 Staff						
Daily	30.44	42.09	2.70	18.08	82.08	3.42
Never	33.22	57.91	97.30	16.09	17.92	21.93
% Missing	98.41	99.27	99.17	96.38	97.86	99.50
Valid N	138	10	14	74	16	21
Valid WTD N	46787	5735	6679	24529	8636	1046
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 5A.2

PERCENTAGE OF STUDENTS WHO ATTEND SCHOOLS IN WHICH PARTICULAR COORDINATION STRATEGIES ARE USED FREQUENTLY OR NOT AT ALL, BY COHORT AND POVERTY CONCENTRATION OF THE SCHOOL AS REPORTED BY THE ENGLISH CHAPTER 1 TEACHER

CHAPTER 1 TEACHER ENGLISH	**TOTAL**	**School Poverty Concentration**				
		0-19%	**20-34%**	**35-49%**	**50-74%**	**75-100%**
1ST GRADE COHORT						
Consultation in Development of Written Lesson Plan						
Daily	5.01	0	0	14.45	2.39	9.06
Never	29.93	7.45	16.10	2.15	37.64	42.37
% Missing	89.23	97.85	92.71	89.98	81.88	79.59
Valid N.	1411	66	154	146	472	570
Valid WTD N	382976	18170	53351	44255	165994	97370
Meetings/Confer. Between Regular & Chapter 1 Staff						
Daily	6.23	0	15.20	14.45	0.23	8.90
Never	21.64	0	22.34	4.18	37.53	7.79
% Missing	89.02	97.85	92.45	89.98	81.88	78.42
Valid N	1468	66	166	146	472	615
Valid WTD N	390490	18170	55288	44255	165994	102948
Regular & Chapter 1 Staff Have Informal Discussion						
Daily	33.49	49.69	59.23	30.88	20.78	35.58
Never	0.58	0	0	2.47	0	1.19
% Missing	88.86	97.85	92.45	89.98	81.88	78.58
Valid N	1453	66	166	146	472	595
Valid WTD N	396120	18170	55288	44255	165994	102185
Regular & Chapter 1 Staff Share Written Record						
Daily	10.54	0	15.63	18.03	8.18	11.37
Never	4.83	0	8.10	2.47	1.37	4.85
% Missing	88.90	97.85	92.66	89.98	81.88	78.58
Valid N	1446	66	159	146	472	595
Valid WTD N	394598	18170	53765	44255	165994	102185
Common Planning Periods to Regular & Chap. 1 Staff						
Daily	26.55	0	25.65	15.60	37.37	20.83
Never	43.44	73.58	65.61	65.03	33.27	29.82
% Missing	88.96	97.85	92.45	89.98	82.04	78.21
Valid N	1474	66	166	146	464	627
Valid WTD N	392644	18170	55288	44255	164573	103965

EXHIBIT 5A.2
(CONTINUED)

CHAPTER 1 TEACHER ENGLISH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
3RD GRADE COHORT						
Consultation in Development of Written Lesson Plan						
Daily	7.37	9.92	0	5.74	7.28	11.60
Never	15.48	1.26	4.08	37.76	19.51	9.49
% Missing	92.65	96.43	92.89	87.93	94.44	83.06
Valid N	1068	62	131	185	182	508
Valid WTD N	223697	34543	38439	54860	27998	67856
Meetings/Confer. Between Regular & Chapter 1 Staff						
Daily	1.71	9.92	0	0	0	0.71
Never	12.41	0	3.28	31.14	16.57	7.65
% Missing	92.43	96.43	92.51	87.93	94.44	81.91
Valid N	1139	62	144	185	182	566
Valid WTD N	230410	34543	40526	54860	27998	72483
Regular & Chapter 1 Staff Have Informal Discussion						
Daily	31.52	15.93	19.27	46.59	46.97	28.42
Never	4.35	0	0.65	17.81	0	0
% Missing	92.42	96.43	92.51	87.93	94.44	81.89
Valid N	1141	62	144	185	182	568
Valid WTD N	230478	34543	40526	54860	27998	72551
Regular & Chapter 1 Staff Share Written Record						
Daily	5.37	9.92	0	3.80	8.18	6.17
Never	7.00	4.18	4.30	20.51	4.47	0.68
% Missing	92.43	96.43	92.82	87.93	94.44	81.52
Valid N	1152	62	136	185	182	587
Valid WTD N	230309	34543	38841	54860	27998	74067
Common Planning Periods to Regular & Chap. 1 Staff						
Daily	12.39	19.87	2.08	9.55	9.71	17.69
Never	59.93	72.21	55.90	65.02	59.01	52.84
% Missing	92.48	96.43	92.51	87.93	94.78	81.88
Valid N	1142	62	144	185	172	579
Valid WTD N	228824	34543	40526	54860	26278	72617
7TH GRADE COHORT						
Consultation in Development of Written Lesson Plan						
Daily	10.95	0	0	28.63	0	17.30
Never	38.56	34.03	49.44	43.35	30.91	33.94
% Missing	97.27	97.44	98.51	96.30	96.74	95.46
Valid N	282	46	30	93	43	67
Valid WTD N	80430	20039	12002	25068	13294	9422

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EXHIBIT 5A.2
(CONTINUED)

CHAPTER 1 TEACHER ENGLISH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
Meetings/Confer. Between Regular & Chapter 1 Staff						
Daily	8.24	0	0	18.49	0	17.24
Never	21.52	15.31	31.81	18.24	26.69	24.72
% Missing	97.15	97.44	98.51	95.77	96.71	95.44
Valid N	300	46	30	110	43	68
Valid WTD N	84038	20039	12002	28640	13294	9458
Regular & Chapter 1 Staff Have Informal Discussion						
Daily	35.52	27.41	31.67	34.47	60.02	23.17
Never	7.01	0	0	0	26.69	24.72
% Missing	97.15	97.44	98.51	95.77	96.71	95.44
Valid N	299	46	30	110	43	68
Valid WTD N	83947	20039	12002	28640	13294	9458
Regular & Chapter 1 Staff Share Written Record						
Daily	4.00	0	0	0	0	34.60
Never	28.42	67.68	17.62	18.41	4.21	24.82
% Missing	97.16	97.44	98.51	95.81	96.71	95.46
Valid N	298	46	30	109	43	67
Valid WTD N	83736	20039	12002	28374	13294	9422
Common Planning Periods to Regular & Chap. 1 Staff						
Daily	14.80	4.91	0	0.32	60.02	34.85
Never	55.06	91.16	80.63	35.48	39.98	24.72
% Missing	97.15	97.44	98.51	95.77	96.71	95.44
Valid N	300	46	30	110	43	68
Valid WTD N	84038	20039	12002	28640	13294	9458
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 5A.3
PERCENTAGE OF STUDENTS WHO ATTEND SCHOOLS WHERE CHAPTER 1 MATHEMATICS AND THE REGULAR CLASSROOM TEACHERS UTILIZE SAME MATERIALS, DIFFERENT MATERIALS OR SAME AND SOME DIFFERENT MATERIALS BY POVERTY CONCENTRATION OF THE SCHOOL

SAME CURRICULUM MATERIALS - MATH	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Use Same Materials	23.79	0	56.49	13.35	12.38	22.08
Use Different Materials	12.94	28.42	15.49	4.73	2.85	33.45
Use Same/Different Materials	63.27	71.58	28.02	81.91	84.77	44.46
% Missing	71.34	94.80	65.42	58.81	71.00	59.92
Valid N	3701	233	569	595	822	1417
Valid WTD N	1019003	43900	253156	181991	265648	191202
3RD GRADE COHORT						
Use Same Materials	18.46	0	42.74	16.05	10.17	24.63
Use Different Materials	24.47	76.35	19.11	3.75	6.28	28.90
Use Same/Different Materials	57.07	23.65	38.14	80.20	83.55	46.47
% Missing	73.39	85.45	67.24	66.39	76.47	62.31
Valid N	3149	338	515	562	487	1182
Valid WTD N	809742	140748	177140	152806	118566	151013
7TH GRADE COHORT						
Use Same Materials	13.67	0.22	0	27.56	4.43	25.92
Use Different Materials	6.11	0	0	0	10.54	35.57
Use Same/Different Materials	80.22	99.78	100.00	72.44	85.03	38.52
% Missing	81.07	81.43	92.58	71.16	78.62	66.15
Valid N	1768	257	133	660	293	425
Valid WTD N	557407	145530	59875	195462	86360	70180
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 5A.4
PERCENTAGE OF STUDENTS WHO ATTEND SCHOOLS WHERE CHAPTER 1 READING/ENGLISH/LANGUAGE ARTS AND THE REGULAR CLASSROOM TEACHERS UTILIZE SAME MATERIALS, DIFFERENT MATERIALS OR SOME SAME AND SOME DIFFERENT MATERIALS BY POVERTY CONCENTRATION OF THE SCHOOL

SAME CURRICULUM MATERIALS - READING	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Use Same Materials	18.84	0	51.83	0	2.98	25.93
Use Different Materials	17.44	45.78	30.62	12.41	1.19	34.00
Use Same/Different Materials	63.72	54.22	17.56	87.59	95.84	40.07
% Missing	51.78	78.19	57.84	39.98	30.28	50.78
Valid N	5232	487	867	802	1299	1712
Valid WTD N	1714538	183998	308652	265192	638771	234819
3RD GRADE COHORT						
Use Same Materials	19.95	0.88	33.78	13.64	8.62	28.95
Use Different Materials	32.89	71.27	31.22	11.16	4.30	28.69
Use Same/Different Materials	47.16	27.85	35.00	75.20	87.08	42.36
% Missing	56.44	61.38	50.27	50.41	58.71	55.10
Valid N	4570	664	914	745	753	1429
Valid WTD N	1325350	373614	268922	225432	208005	179909
7TH GRADE COHORT						
Use Same Materials	13.52	0.52	0	27.98	17.88	41.57
Use Different Materials	31.20	55.88	39.14	10.36	0	27.44
Use Same/Different Materials	55.28	43.59	60.86	61.66	82.12	30.99
% Missing	70.48	64.00	78.60	71.48	68.68	54.31
Valid N	2464	468	372	746	322	556
Valid WTD N	869385	282083	172749	193303	126526	94724
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 5A.5

PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 MATHEMATICS TEACHERS WHO REPORT USING DIFFERENT MATERIALS AND SAME MATERIALS BY COHORT AND POVERTY CATEGORY

CHAPTER 1 TEACHER CHAPTER 1 COMPARED TO REGULAR MATHEMATICS MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Only Class	18.98	0	6.46	31.96	31.76	18.10
Same Materials & Levels	39.14	63.13	47.41	44.04	21.31	24.77
Different Levels	10.13	0	20.93	0	7.87	11.49
Different Materials	26.78	0	15.67	24.00	39.06	45.64
Different Materials & Levels	4.97	36.87	9.54	0	0	0
% Missing	97.00	99.26	95.69	95.47	97.07	96.16
Valid N	478	38	59	66	152	160
Valid WTD N	106745	6222	31535	20009	26813	18329
3RD GRADE COHORT			-			
Only Class	16.01	0	4.03	1.69	29.88	32.00
Same Materials & Levels	36.94	16.50	57.71	28.36	26.95	21.53
Different Levels	11.81	0	11.30	16.64	23.99	8.55
Different Materials	25.20	64.92	4.18	37.84	18.19	35.92
Different Materials & Levels	10.05	18.58	22.78	15.46	1.00	2.00
% Missing	95.99	99.19	94.36	95.87	96.23	90.38
Valid N	652	29	86	85	115	330
Valid WTD N	122148	7836	30496	18798	18991	38545
7TH GRADE COHORT						
Only Class	47.49	20.20	20.09	43.68	88.08	40.53
Same Materials & Levels	26.35	0	60.10	33.98	0	21.89
Different Levels	6.04	0	0	11.24	0	0
Different Materials	7.42	29.69	0	9.51	0	0.39
Different Materials & Levels	12.69	50.11	19.81	1.59	11.92	37.19
% Missing	97.05	99.15	98.96	93.12	96.06	95.61
Valid N	280	14	21	116	58	70
Valid WTD N	86741	6628	8358	46629	15923	9111
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 5A.6

PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 ENGLISH/READING TEACHERS WHO REPORT USING DIFFERENT MATERIALS AND SAME MATERIALS BY COHORT AND POVERTY CATEGORY

CHAPTER 1 TEACHER CHAPTER 1 COMPARED TO REGULAR ENGLISH/READING MATERIALS	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Only Class	2.24	0	0	19.94	0	2.11
Same Materials & Levels	25.91	0	33.82	32.65	25.66	19.23
Different Levels	4.97	31.69	10.41	0	3.45	1.43
Different Materials	33.69	68.31	23.79	15.63	26.25	53.92
Different Materials & Levels	33.19	0	31.98	31.78	44.65	23.31
% Missing	89.39	97.91	92.01	92.74	82.06	79.40
Valid N	1397	60	156	114	493	569
Valid WTD N	377244	17628	58506	32070	164388	98259
3RD GRADE COHORT						
Only Class	4.93	0	0	0	12.29	9.01
Same Materials & Levels	25.06	22.64	35.07	41.18	13.07	10.97
Different Levels	13.14	0	1.24	3.64	39.05	17.88
Different Materials	29.78	43.34	10.38	26.82	17.57	45.31
Different Materials & Levels	27.09	34.02	53.31	28.35	18.03	16.83
% Missing	92.23	96.47	92.65	91.08	91.93	81.54
Valid N	1116	57	135	148	239	530
Valid WTD N	236507	34107	39753	40557	40654	73955
7TH GRADE COHORT						
Only Class	32.76	11.36	35.09	8.14	53.67	58.04
Same Materials & Levels	11.41	53.86	0	0	0	12.75
Different Levels	6.65	4.04	0	22.78	0	0
Different Materials	18.09	7.24	36.28	10.04	26.41	14.23
Different Materials & Levels	31.08	23.50	28.63	59.05	19.91	14.98
% Missing	96.17	97.51	98.16	95.65	92.52	91.04
Valid N	400	45	42	122	95	95
Valid WTD N	112681	19486	14881	29446	30210	18568
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 5A.7

PERCENTAGE OF STUDENTS WHOSE REGULAR MATHEMATICS TEACHER REPORTS THAT THE CHAPTER 1 OR REGULAR ENGLISH TEACHER HAS PRIMARY RESPONSIBILITY FOR TEACHING OR SHARES RESPONSIBILITY WITH THE CHAPTER 1 TEACHER BY COHORT AND POVERTY CATEGORY

PRIMARY RESPONSIBILITY FOR TEACHING	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Regular Teacher Primary Responsibility	67.62	62.08	57.25	56.32	70.20	82.19
Chapter 1 Teacher Primary Responsibility	6.74	1.97	16.27	5.99	3.97	6.26
Regular Teacher & Chapter 1 Teacher Share	24.59	35.94	21.33	37.69	25.82	11.55
% Missing	56.50	81.08	56.91	52.75	50.47	35.51
Valid N	5855	474	885	704	1618	2066
Valid WTD N	1546640	159610	315477	208739	453803	307679
3RD GRADE COHORT						
Regular Teacher Primary Responsibility	68.31	58.69	73.24	64.76	62.91	74.72
Chapter 1 Teacher Primary Responsibility	6.27	4.98	6.18	8.19	10.91	3.93
Regular Teacher & Chapter 1 Teacher Share	25.05	36.33	18.95	26.85	26.18	21.13
% Missing	53.41	63.15	50.76	50.17	50.64	42.96
Valid N	5312	630	787	717	1255	1808
Valid WTD N	1417467	356480	266269	226550	248658	228558
7TH GRADE COHORT						
Regular Teacher Primary Responsibility	44.49	59.48	62.27	27.16	41.56	38.64
Chapter 1 Teacher Primary Responsibility	18.80	2.69	12.79	37.15	20.93	6.35
Regular Teacher & Chapter 1 Teacher Share	36.05	37.14	24.93	35.39	34.88	55.01
% Missing	80.29	80.39	88.58	71.42	79.32	72.30
Valid N	1737	294	168	635	316	323
Valid WTD N	580591	153648	92161	193654	83542	57438
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

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EXHIBIT 5A.8

PERCENTAGE OF STUDENTS WHOSE REGULAR ENGLISH TEACHER REPORTS THAT THE CHAPTER 1 OR REGULAR MATHEMATICS TEACHER HAS PRIMARY RESPONSIBILITY FOR TEACHING OR SHARES RESPONSIBILITY WITH THE CHAPTER 1 TEACHER BY COHORT AND POVERTY CATEGORY

PRIMARY RESPONSIBILITY FOR TEACHING	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Regular Teacher Primary Responsibility	67.42	60.45	58.60	56.32	70.23	80.83
Chapter 1 Teacher Primary Responsibility	6.93	1.94	15.93	5.99	3.97	7.47
Regular Teacher & Chapter 1 Teacher Share	24.65	37.60	20.63	37.69	25.80	11.70
% Missing	56.25	80.79	56.19	52.75	50.42	35.35
Valid N	5891	478	903	704	1620	2078
Valid WTD N	1555485	162108	320708	208739	454182	308416
3RD GRADE COHORT						
Regular Teacher Primary Responsibility	68.48	67.99	74.18	57.39	60.58	72.61
Chapter 1 Teacher Primary Responsibility	8.34	5.54	6.22	19.59	8.16	6.28
Regular Teacher & Chapter 1 Teacher Share	22.77	26.47	18.02	22.83	31.26	20.69
% Missing	53.89	65.31	49.32	48.05	51.32	40.05
Valid N	5348	607	819	746	1270	1838
Valid WTD N	1402762	335535	274061	236203	245260	240209
7TH GRADE COHORT						
Regular Teacher Primary Responsibility	59.29	63.64	87.06	44.10	45.41	78.70
Chapter 1 Teacher Primary Responsibility	13.26	8.83	9.32	13.89	33.86	2.25
Regular Teacher & Chapter 1 Teacher Share	25.91	27.30	3.62	38.88	18.01	19.04
% Missing	80.71	80.51	88.08	68.89	83.42	80.04
Valid N	1488	247	172	613	235	220
Valid WTD N	568210	152718	96186	210797	66974	41388
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

Exhibit 5A.9

Percentage of Students whose Chapter 1 Mathematics Teacher Reports that the Chapter 1 or Regular English Teacher has Primary Responsibility for Teaching or Shares Responsibility with the Chapter 1 Teacher by Cohort and Poverty Category

Primary Responsibility for Basic Skill	Total	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1st Grade Cohort						
Regular Teacher Primary Responsibility	5.78	21.75	0	0	18.45	2.61
Chapter 1 Teacher Primary Responsibility	71.73	78.25	100.00	55.80	41.41	81.85
Regular Teacher & Chapter 1 Teacher Share	22.49	0	0	44.20	40.13	15.54
% Missing	97.16	99.26	96.46	94.27	97.62	96.23
Valid N	448	38	44	78	131	154
Valid WTD N	101093	6222	25945	25332	21795	17963
3rd Grade Cohort						
Regular Teacher Primary Responsibility	5.64	4.25	2.61	6.13	12.68	6.60
Chapter 1 Teacher Primary Responsibility	76.83	95.75	93.86	68.24	54.25	64.06
Regular Teacher & Chapter 1 Teacher Share	17.53	0	3.54	25.63	33.07	29.34
% Missing	95.98	98.52	94.41	95.20	96.85	91.90
Valid N	614	45	83	96	92	291
Valid WTD N	122166	14349	30219	21827	15850	32439
7th Grade Cohort						
Regular Teacher Primary Responsibility	36.22	7.78	0	34.44	82.08	52.25
Chapter 1 Teacher Primary Responsibility	19.22	0	22.09	27.79	0	38.23
Regular Teacher & Chapter 1 Teacher Share	44.57	92.22	77.91	37.77	17.92	9.52
% Missing	98.36	99.27	99.17	96.38	97.86	98.74
Valid N	161	10	14	74	16	44
Valid WTD N	48361	5735	6679	24529	8636	2620
Total N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
Total Weighted N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325

EXHIBIT 5A.10

PERCENTAGE OF STUDENTS WHOSE CHAPTER 1 ENGLISH TEACHER REPORTS THAT THE CHAPTER 1 OR REGULAR MATHEMATICS TEACHER HAS PRIMARY RESPONSIBILITY FOR TEACHING OR SHARES RESPONSIBILITY WITH THE CHAPTER 1 TEACHER BY COHORT AND POVERTY CATEGORY

PRIMARY RESPONSIBILITY FOR BASIC SKILL	TOTAL	School Poverty Concentration				
		0-19%	20-34%	35-49%	50-74%	75-100%
1ST GRADE COHORT						
Regular Teacher Primary Responsibility	1.09	7.45	2.21	0	0.60	0.76
Chapter 1 Teacher Primary Responsibility	79.56	35.38	92.01	55.62	93.02	67.36
Regular Teacher & Chapter 1 Teacher Share	19.34	57.17	5.78	44.38	6.38	31.89
% Missing	88.68	97.85	92.31	89.66	81.68	78.15
Valid N	1519	66	170	153	492	630
Valid WTD N	402415	18170	56317	45679	167801	104220
3RD GRADE COHORT						
Regular Teacher Primary Responsibility	4.06	1.26	4.04	1.40	6.77	6.75
Chapter 1 Teacher Primary Responsibility	70.74	76.35	91.30	62.77	50.16	66.95
Regular Teacher & Chapter 1 Teacher Share	25.21	22.39	4.66	35.84	43.08	26.31
% Missing	92.11	96.43	92.32	87.93	94.75	81.26
Valid N	1176	62	148	185	174	600
Valid WTD N	239971	34543	41520	54860	26463	75104
7TH GRADE COHORT						
Regular Teacher Primary Responsibility	30.45	15.31	52.21	22.34	60.55	17.85
Chapter 1 Teacher Primary Responsibility	33.20	56.30	47.79	13.34	39.45	19.44
Regular Teacher & Chapter 1 Teacher Share	36.35	28.39	0	64.32	0	62.70
% Missing	97.11	97.44	98.51	95.77	96.67	94.77
Valid N	325	46	30	110	44	93
Valid WTD N	85126	20039	12002	28640	13471	10847
TOTAL N						
1st Grade Cohort	10,820	1,562	1,629	1,452	2,404	3,500
3rd Grade Cohort	10,333	1,794	1,591	1,392	2,092	3,158
7th Grade Cohort	7,214	1,475	1,312	1,913	1,470	942
TOTAL WEIGHTED N						
1st Grade Cohort	3,555,521	843,743	732,050	441,820	916,133	477,074
3rd Grade Cohort	3,042,496	967,336	540,786	454,634	503,801	400,688
7th Grade Cohort	2,945,025	783,549	807,155	677,665	403,963	207,325